# DEPARTMENT OF THE ARMY HEADQUARTERS, UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND Fort Monroe, Virginia 23651

TRADOC Regulation No. 71-9

25 January 1982

# Force Development USER TEST AND EVALUATION

This revision reflects the TRADOC Test and Evaluation realignment of 3 December 1980 to improve administration, management and capabilities of TRADOC's user test and evaluation programs. Changes include designation of a TRADOC Deputy Chief of Staff for Test and Evaluation and establishment of a test and evaluation element of the Combined Arms Center, Fort Leavenworth, KS for the management of TRADOC independent evaluation efforts. \*The guidances in appendixes B through K, M through Q and S through T of superseded TRADOC Reg 71-9 (1 October 1978) will continue to be used until further notice. These appendixes will be replaced by TRADOC pamphlets in the 71 series which will be published to establish revised implementing procedures to this regulation. The word his is intended to include both the masculine and feminine genders and any exceptions to this will be so noted. Local limited supplementation of this regulation is permitted but not required. If supplements are issued, one copy will be furnished HQ TRADOC, ATTN: Deputy Chief of Staff for Test and Evaluation (ATTE-P), Fort Monroe, VA 23651.

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\*Except as indicated above, this regulation supersedes TRADOC Reg 71-9, 1 Oct 78, with Ch 1, 31 Oct 80. Additionally, RCS ATCD-14 is replaced by RCS ATTE-1, RCS ATCD-13 is replaced by RCS ATTE-2 and RCS ATCD-8 and ATCD-15 are replaced by RCS ATTE-3.

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### CHAPTER 1

### **GENERAL**

- 1-1. Purpose. This regulation prescribes policies, responsibilities, and procedures for TRADOC user test and evaluation.
- 1-2. Scope. Policies and procedures of this regulation apply to all TRADOC organizations. This regulation is to be used in conjunction with AR 71-3 and other publications listed in appendix F.
- 1-3. Explanation of terms. Terms not defined in JCS Pub 1 (DOD Dictionary), AR 310-25 (Dictionary of United States Army Terms), AR 71-3 (User Testing), and terms requiring further explanation are defined at appendix A.
- 1-4. <u>Responsibilities</u>. General responsibilities of the TRADOC HQ and subordinate elements are contained in the organization and functions regulation, TRADOC Reg 10-41. Specific responsibilities for test and evaluation are:
- a.  $\underline{\text{HQ TRADOC}}$ . Responsibilities for major staff elements of HQ TRADOC are:
- (1) <u>Deputy Chief of Staff for Test and Evaluation (DCSTE)</u>. The DCSTE is responsible for--
  - (a) Staff supervision of the TRADOC test organizations.
  - (b) Policy and procedures governing TRADOC user test and evaluation.
- (c) Bilateral agreements with allies for cooperative user testing and sharing of test and evaluation results.
- (d) Planning, programing, conducting and reporting of operational test and evaluation of nonmajor systems (nonmajor OT).
- (e) Planning, programing, conducting and reporting of force development test and experimentation (FDTE) (new concepts of tactics, doctrine and organization and new items of materiel).
  - (f) Management of the TRADOC concept evaluation program (CEP).
- (g) Approval and submission to DA/DOD of TRADOC input to OSD directed joint tests (JT) and tasking CAC for TRADOC independent evaluation of JT.
- (h) Providing issues and criteria for operational test and evaluation of major, designated acquisition programs (DAP) and selected nonmajor systems conducted by the Operational Test and Evaluation Agency (OTEA) and supporting these tests as directed by the Army Five Year Test Program (FYTP).
  - (i) Approving test waiver requests.
- (j) Developing, acquiring and maintaining instrumentation and simulators required to support Army user test and evaluation.

- (2) <u>Deputy Chief of Staff for Combat Developments (DCSCD)</u>. The DCSCD is responsible for--
- (a) Insuring that test and evaluation results are used in updating cost and operational effectiveness analysis (COEA) and in formulating the TRADOC position for material acquisition decision reviews (IPR/ASARC/DSARC).
- (b) Providing TRADOC combat developer representation at the test integration working group (TIWG) for all systems not having a TRADOC System Manager (TSM) in accordance with AR 70-10 and DA Pam 70-21.
- (c) Approval of test support packages (TSP) prepared by TRADOC centers and schools.
- (d) Coordinating materiel acquisition documents with DCSTE including requirements documents, acquisition plans, COEA, IPR/ASARC/DSARC packages and TRADOC position and priorities documents.
- (e) Reviewing and providing comments on test and evaluation documents to originating/approving organization.
- (3) <u>Deputy Chief of Staff for Engineer (DCSENGR)</u>. The DCSENGR is responsible for obtaining safety releases from material developers and developing and issuing, to TRADOC test organization, safety releases for all TRADOC user tests.
- (4) Deputy Chief of Staff for Doctrine (DCSDOC). The DCSDOC is responsible for--
- (a) Coordinating all new or proposed operational and doctrinal concepts with DCSTE for determining whether the concept can best be evaluated through models, simulations or FDTE.
- (b) Reviewing all doctrine and threat test support packages and advising DCSCD on approval or needed modification.
- (5) Deputy Chief of Staff for Training (DCST). The DCST is responsible for--
- (a) Developing, in coordination with DCSCD and DCSTE, and disseminating TRADOC training policies and procedures to insure availability of the training support package prior to initiation of OT.
- (b) Coordinating training effectiveness analyses (TEA) plans and reports with DCSTE for determination of user test requirements.
- (c) Coordinating with DCSTE to determine applicability of user test programs to determine new training equipment needs and validation of new training concepts.
- b. <u>US Army Combined Arms Center (CAC)</u>. CAC (through the Combined Arms Combat Development Activity (CACDA)) is the TRADOC independent evaluator and is responsible for--
  - (1) Developing or approving independent evaluation plans and reports.

- (2) Developing, in coordination with the TRADOC system manager and TRADOC proponent, evaluation issues and criteria for all major, DAP and category 1 nonmajor systems and submitting for HQ TRADOC approval and for forwarding to OTEA.
- (3) Developing TRADOC's proposals for DOD directed joint test (JT) programs, submitting for HQ TRADOC approval and for forwarding to DA/DOD; and initiating and managing Army independent evaluations of selected JT.
- (4) Serving as a member of the TRADOC Concept Evaluation Review Committee and Test Instrumentation Review Committee.
- c. <u>Proponent</u>. The TRADOC proponent center/school serves as the principal TRADOC agency for analyzing and evaluating new tactical concepts and system improvements, and defining user requirements for materiel, organizations and force structures, logistic support, and training support. For areas of assigned responsibilities, the proponent will--
  - (1) Identify evaluation or operational issues and test criteria.
  - (2) Prepare independent evaluation plans and reports.
- (3) Develop, coordinate and submit for approval the combat developer's test support packages.
- d. <u>Test organizations</u>. TRADOC test organizations are the Army's principal capability for conducting user test and evaluation and for participating in Department of Defense related joint test and evaluation. These organizations are responsible for--
- (1) Planning, conducting and reporting on TRADOC tests as tasked by HQ TRADOC. (See figure 3-1 for test organization documentation responsibilities.)
- (2) Supporting other tests and test agencies as directed by HQ TRADOC and the Army Five Year Test Program.
- (3) Assisting and advising the TRADOC proponents and analytical activities on test and evaluation of materiel, organization and operational concepts and validation of models and simulations.
- (4) Developing and maintaining instrumentation and facilities to support Army user testing.
- e. TRADOC system manager (TSM). A TSM is chartered (TRADOC Reg 71-12) for major and DAP systems and is responsible for--
- (1) Representing the appropriate center/school (proponent) as point of contact for all test and evaluation matters.
- (2) Serving as the principal TRADOC representative at test integration working group (TIWG) meetings.
- (3) Insuring <u>submission</u> of issues, criteria and all required test support packages through HQ TRADOC to OTEA.

- (4) Providing the combat developer's principal spokesperson to RAM scoring and assessment conferences for TSM-managed systems.
- (5) Insuring that the results from developmental testing, operational testing or FDTE are provided and used in the cost and operational effectiveness analysis (COEA)/training effectiveness analysis (TEA).
  - f. US Army Logistics Center (USALOGC). The USALOGC is responsible for--
- (1) Serving as TRADOC's executive agent for reliability, availability and maintainability (RAM) and integrated logistical supportability (ILS) of materiel.
- (2) Supporting the TRADOC independent evaluator (CAC) and OTEA with RAM and ILS evaluations and expertise.
- g. Logistics oriented schools. Several TRADOC schools provide direct support (DS) and general support (GS) maintenance training and are responsible for development of support equipment requirements and training of logistics personnel for new materiel and equipment. These schools will assist the TRADOC proponent in planning and conducting test and evaluation. These logistics oriented schools consist of the Quartermaster School, Transportation School, Missile and Munitions Center and School, Ordnance Center and School, Chemical School, Engineer School, and the Signal School. The commodity areas for which each of these schools are responsible are designated in appendix A, TRADOC Reg 700-1.
- h. <u>US Army Air Defense School (USAADS)</u>. In addition to the responsibilities in paragraph 1-4c, the USAADS is responsible for--
- (1) Custodianship, operation and maintenance of the air defense portion of the Army Development and Acquisition of Threat Simulators (ADATS) Program.
- (2) Developing requirements for air defense simulators, in coordination with CACDA, test organizations and proponents.
  - (3) Developing threat tactics and doctrine for air defense simulators.
- (4) Assisting test organizations in determining threat requirements and scheduling use of air defense threat simulators.
- i. <u>US Army Soldier Support Center</u>, <u>National Capitol Region (USASSC (NCR))</u>. USASSC (NCR) is responsible for--
- (1) Serving as TRADOC executive agent for manpower analysis and integrated personnel support (IPS) aspects of developing systems and concepts.
- (2) Advising and assisting combat developments proponents/TSM in determining personnel related evaluation issues and criteria.
- (3) Reviewing all test and evaluation documentation (i.e., IEP, TDP, OTP, TSP and IER) for personnel requirements and submitting appropriate comments to preparing/approving agencies.
- (4) Assisting test organizations in determining representative soldier profiles and supporting CACDA's IEP and IER functions.

- (5) Providing a personnel representative to TIWG as an associate member.
- j. <u>US Army Training Support Center (USATSC)</u>. The USATSC is TRADOC's executive agent for training systems and subsystems and is responsible for--
- (1) Insuring that training and training publications are developed and are adequate for new systems.
  - (2) Serving as TRADOC's training developer for training devices.
- k. US Army TRADOC Systems Analysis Activity (USATRASANA). TRASANA is the TRADOC executive agent for training effectiveness analysis and is responsible for--
- (1) Serving as TRADOC Training Effectiveness Analysis (TEA) System Management Agency.
- (2) Providing TEA study assistance to proponents in accordance with the provisions of TRADOC Reg 350-4.
- (3) Serving, at the request of the proponent, as the interface with the test organization on TEA issues and methodology.
- (4) Advising and assisting HQ TRADOC in the establishment and dissemination of TEA policy, procedures, and methdologies applicable to the TRADOC test mission.

### CHAPTER 2

### TEST AND EVALUATION POLICY

- 2-1. Testing during research, development and acquisition. Testing of materiel systems during research, development and acquisition is conducted to demonstrate the extent to which the total system meets its technical and operational requirements against a predetermined threat; demonstrate the adequacy of the logistics support system, personnel support system, and training subsystem; provide data for assessing developmental and operational risk; provide data for incorporating in the COEA/TEA; support other decisions; verify that the technical, training, operational and support problems identified in previous testing have been corrected; develop organizations, the basis of issue, concept of employment, tactics and techniques; and insure that all critical issues to be resolved by testing have been adequately addressed. In this regulation, development testing (DT) will be addressed only as to its interface and integration with user testing. Detailed procedures and required document formats will be explained in proposed TRADOC Pam 71-13, 71-14, and 71-15 (to be published).
- 2-2. Extent of testing. Testing is conducted only to the extent necessary to answer the test issues. Unnecessary testing is prohibited. Relevant test data, regardless of its source, will be shared by all testers to expedite testing and reduce costs. All test planning will be coordinated to minimize the number of required test items and the number and scope of tests while adequately answering test issues and objectives.
- a. Testing of developmental systems will normally include an Operational Test I (OT I) for systems which undergo a demonstration and validation phase, an OT II for systems which undergo a full scale development phase, and a follow-on evaluation (FOE) if required.
- b. Extent of testing for non-developmental items (NDI) will be determined and recorded in the minutes of the materiel acquisition decision process (MADP) review (i.e., DSARC, ASARC or IPR). If it is determined that user testing is required to answer critical issues prior to an affirmative NDI decision, such testing will be OT II. User issues associated with NDI prior to a MADP may also be addressed informally through the concept evaluation program (CEP). Required user testing after an affirmative decision by the MADP to pursue NDI will be FDTE or FOE. Developmental testing will be accomplished as production type testing, e.g., intial production testing (IPT) and first article testing (FAT). To achieve a decision by the MADP to proceed with an NDI acquisition, the follow-documentation is necessary:
  - (1) An approved requirements document.
  - (2) Approved IEP (TRADOC, DARCOM) used for market survey and system evaluation.
  - (3) User/market survey.
  - (4) Approved acquisition plan.

- (5) Approved IER (TRADOC, DARCOM).
- (6) IPR package with proposed DARCOM position.
- (7) Approved TRADOC position for IPR.

## 2-3. Types of user testing.

- a. OT I is that operational test conducted near the end of the demonstration and validation phase to test the operational suitability and effectiveness of the total system undergoing test and to provide data in support of COEA/TEA. This test should be as well conceived as possible in order to reduce risk during subsequent user testing and minimize changes to the material design configuration.
- b. OT II is that operational test conducted near the end of full scale development to test the demonstrated operational suitability, military utility and operational effectiveness of the total system (i.e., hardware, software, combat developments, training subsystem, personnel, and logistics). It also provides training effectiveness data to support the training effectiveness analysis (TEA). OT II is normally the most critical in terms of contributing to a decision which will commit Army production funds. If the OT II evaluation reveals significant deficiencies, including any in the test support packages, corrections will be made. Subsequently, prior to a production decision, OT IIA will be conducted as directed by the decision maker.
- c. OT III is normally a test of preproduction prototypes or pilot items. Its purpose is to support the full production decision by providing data on the materiel system to estimate operational suitability and to verify that all testable critical issues have been resolved.
- d. Follow-on evaluation (FOE) is that test and evaluation of materiel systems conducted subsequent to the full production decision to provide information regarding unresolved operational and training issues which were not considered critical to the production decision. The need for and scope of the FOE will be determined by the unresolved issues for test.
- e. Initial operational capability-force development test and experimentation (IOC-FDTE) is conducted with the first production material which is deployed to the using units in coordination with the IOC unit training cycles. An IOC-FDTE is conducted to address the operational issues and training subsystem effectiveness issues which may be unresolved when the system is first deployed to user units. TRADOC will normally be the tester for all IOC-FDTE, including that for major and designated acquisition programs (DAP).
- f. FDTE-operational feasibility testing (FDTE-OFT) is a limited category of FDTE conducted by the user, as approved by HQDA (DCSOPS), to permit an operational evaluation of systems developed by another service, foreign nation, or a commercial firm. FDTE-OFT may provide input for a new letter of agreement (LOA), required operational capability (ROC) or letter requirement (LR), modification of a program management plan (PMP) or initiation of a product improvement program (PIP).
- g. Concept evaluation program (CEP) tests are innovative tests involving ADCSTE (Resources and Policy), TRADOC controlled funds for the conduct of tests

and evaluations on new or modified hardware. CEP provides TRADOC commanders a quick reaction and simplified process for resolving or solidifying combat developments requirements. CEP tests should not be developed as a means of avoiding the normal testing programs. However, issues satisfied during CEP need not be re-examined during formal OT and, in fact, are prohibited from unnecessary or redundant evaluation by AR 71-3. Use of CEP to provide an experimental data base for requirements documents and to expedite the material acquisition process is strongly encouraged.

- h. Force development test and experimentations (FDTE) are scheduled as needed during any phase of development. FDTE may be conducted for developing requirements documents or for developing operational issues, concepts of employment, tactics, training, techniques and organization. Thus, FDTE can be used to determine the specific organization, concepts of employment, training, and support tactics and techniques which are to be evaluated for adequacy during OT of the system. FDTE also include field experiments which are designed to gather data through instrumentation to address a training development problem or to support simulations, models or wargames. Requirements for FDTE can be generated by results of other combat developments, training developments or training effectiveness analysis testing and studies. Instructions on initiating FDTE proposals are contained in AR 71-3. HQ TRADOC may direct initiation of a proposal or submission of FDTE projections.
- Customer test (CT) is a special category of tests performed as a service for a command or agency outside TRADOC at their request. While the test organization is under TRADOC control for the test and must follow TRADOC operating and safety procedures, control of the test scope, tactical context, data requirements, test planning, test reporting and documentation distribution/coordination is at the discretion of the customer. Requests for such tests will be forwarded to ADCSTE (Resources & Policy) for determination of TRADOC capability to support the test. If ADCSTE concludes that TRADOC can perform the test, a test organization will be tasked by letter of execution (LOE) to conduct the test. The LOE will provide a Test Resource Management System (TRMS) project number for the test, requirements for obtaining safety releases, disposition instructions for hardware items, TRADOC Forms 416-R (TRADOC TRMS Transcript-Project Source) and 417-R (TRADOC TRMS Transcript-Test Scheduling)(TRADOC Reg 71-7) and any other special instructions necessary. Funding for the test will be provided by the customer direct to the test organization. The customer will approve the test design plan (TDP). Customer tests cannot be used in place of TRADOC OT or FOE requirements since test control is maintained by the customer.
- j. Product improvement proposal (PIP) testing is conducted to insure suitability of the proposed product improvement for Army use. A PIP which significantly changes the performance envelope (tactical/operational capability) of the system is considered developmental in nature and must be initiated as a research, development, test and evaluation (RDTE) effort against a new requirements document. For these PIP, OT II will be conducted similar to that for developmental systems. For other PIP items, user testing funded through the PIP will be conducted when necessary. Sufficient testing will be conducted to demonstrate the ability of the product improvement to meet its operational requirements, to provide data to assess military utility benefit, to verify that the operational and logistics problems identified in the approved PIP have been corrected, and to insure that all critical operational issues to be addressed by

testing have been adequately considered. As for any user test, testing may be terminated by the test command or agency at any time that it appears the equipment is unsuitable and has no chance of meeting the major requirements or poses undue hazards to personnel or equipment. Upon termination of testing, an appropriate program review will be initiated by the product improvement sponsoring agency to consider future action. Product improvement managers are responsible for providing a complete end item and any modification to the system support package that is ready for test to the command or agency that is responsible for the test. It is not sufficient to provide only the improved component(s).

- k. Joint tests are tests in which the Army participates with one or more of the services to evaluate systems or concepts having an interface with or requiring a test environment of another service. TRADOC proposals for OSD-directed joint test programs will be developed by CAC and will be submitted to HQ TRADOC for approval and for forwarding to DA/DOD. OTEA has overall Army management responsibility for OSD-directed joint test programs.
- 2-4. Test and evaluation of operational concepts. An operational concept describes a required military performance of one or more combat, combat support or combat service support functions for either Army, joint service or combined forces use. The Deputy Chief of Staff for Doctrine (DCSDOC), TRADOC is responsible for development of operational concepts and for coordination of requirements with ADCSTE (Resources & Policy). ADCSTE will provide assistance by determining test needs, recommending test methods, procedures and methodologies. Also, ADCSTE will determine whether the concept can be validated (evaluated) through models, simulations or field testing (FDTE) and will task an appropriate agency to plan and conduct the test and evaluation of the concept. The designated test proponent will prepare the outline test plan (OTP) and accomplish resource planning similar to any other type test. Generally, execution of the test will be similar to that of an FDTE. DCSDOC will monitor and advise during test planning and execution. TRADOC Reg 11-7 provides TRADOC's policy for operational concepts and Army doctrine program.
- 2-5. Test and evaluation of computer software. Computer software that is developed for either new or existing tactical systems will undergo sufficient testing to provide a valid estimate of system effectiveness and suitability. Testing will be conducted in phases, corresponding to the phases of development of the software. Quantitative and demonstrable performance objectives will be established for each phase of computer software development. The objectives will be structured to demonstrate that software development has reached a level of maturity appropriate to each phase. Decisions to proceed from one development phase to the next will be made by the appropriate decision body based on quantitative demonstration of adequate software performance through test and evaluation. Prior to release for operational use, sufficient operational testing will be conducted to evaluate the software's effectiveness in the operational environment. Such operational testing will include combined hardware and software testing under realistic conditions using typical operator personnel. DOD Directive 5000.3 and paragraph 2-29, AR 1000-1, as appropriate, provide further guidance for testing computer software. Waiver for operational testing of software will be based on satisfaction of critical issues of the independent evaluation plan and submitted in accordance with paragraph 2-7 of this regulation.

### 2-6. Testing strategies and sequences.

- a. No single testing formula applies to all materiel acquisition. Test and evaluation programs must be flexible and tailored to support the acquisition strategy for the system as opposed to routinely following the life cycle test model depicted in AR 70-10 and DA Pam 11-25. Scheduled test programs will be examined at milestone I and at milestone II of the materiel acquisition process (MAP) to determine whether expanding the testing in the next phase could provide necessary information earlier and consequently reduce the overall time and resources devoted to testing throughout the complete acquisition cycle. Additionally, other tests undergoing planning should be reviewed to determine if required data could be obtained with minor changes to existing tests.
- b. Representative test strategies and sequences interfaced with life cycle phases and decision reviews that may be used for program and test planning are depicted in figure 1-1 of AR 71-3. OT IIA is a contingency test that only takes place when the results of OT II indicate serious problems that preclude TRADOC support of a full production decision. In these cases, appropriate changes to the system will be made and the system retested during OT IIA. Upon successful completion of OT II or OT IIA, a production decision will be made. FOE will normally be scheduled for programing purposes, but the decision review authorities making the full production decision may, under exceptional circumstances, determine that limited production and further testing is required prior to initiation of full production. In all strategies and sequences, the need for and type of subsequent testing (i.e., OT, FOE, IOC-FDTE or other) will depend on the number, type and impact of unresolved issues and will be formally recorded in the minutes of the acquisition decision review.
- TRADOC's policy is to conduct separate operational testing rather than a combined DT and OT. However, under certain circumstances, these tests may be combined when clearly identified and significant cost and time benefits would result or separation would cause excessive delay involving an unacceptable military risk or unacceptable increase in acquisition costs. The determination of unacceptable military risk or unacceptable increase in acquisition cost is a function of the decision review (IPR/ASARC/DSARC). All test planning will be coordinated with the objective of minimizing the number of required test items and the number and scope of tests while adequately answering test issues and objectives. This means that some OT test issues may be addressed during DT or conversely, some DT issues may be addressed in OT. When DT and OT are combined, the TRADOC test organization will prepare and submit an OTP for presentation to the Test Schedule and Review Committee (TSARC), and will prepare OT test design plan (TDP) and test report (TR) which are separate from those prepared by the DT test organization. Separate OT IEP and IER will also be prepared in this case. Even though a combined or concurrent test may be conducted, the DT and OT planning, data analysis, and reporting will be completely separate and distinct.

### 2-7. Waivers.

a. Waiver of OT may be sought when data necessary for decision purposes can be obtained from other sources (e.g., FDTE, DT, prior testing) or test objectives can be achieved by alternate means. If the TRADOC proponent determines that all the operational issues in the approved IEP can be answered in DT, the separate OT will not be conducted, and the proponent will submit a waiver request. If the waiver request is approved, the TRADOC proponent will

prepare the IER using the data and test report generated from DT. Requests from CAC or TRADOC proponents (through CAC) for waiver of OT will be by letter to ADCSTE (Resources & Policy) and will contain the following as a minimum:

- (1) Approriate identification of the OT and system for which the waiver is requested.
- (2) A statement that data necessary to support the appropriate decision are, or will be, available. A summary of where the data are to be obtained and their availability will be included. It will be necessary to state all the critical issues and associated criteria and to what extent available data answer these issues.
- (3) A list of basic test objectives and a detailed statement of how they have been or will be attained.
- (4) A statement of concurrence from the training developer and test organization when less than a complete OT will be waived, i.e., any portion thereof.
  - (5) Further supporting rationale as appropriate.
- (6) Concurrence and appropriate logistics and training impact statements from the USALOGC and USATSC are required prior to issuance of any waiver for user testing or initiating any user testing which does not address logistics supportability, training concepts, or RAM. Testing of the TRADOC approved maintenance, training (to include Skill Performance Aids (SPAS)) and logistics support concepts must be accomplished during OT II. If these concepts have not been fully developed by the time of OT II, a waiver must be requested by the TRADOC proponent through the USALOGC, USATSC (as appropriate) via CAC to ADCSTE (Resources & Policy) for approval. If it appears that incomplete or inadequate testing of TRADOC approved training and logistics support concepts will occur during OT II, ADCSTE (Resources & Policy) will be advised of the potential problem as soon as it is known, followed by a request for waiver or request for test changes or delay. Additionally, a recommended solution will be provided in the waiver request along with cost and schedule impacts of complying with TRADOC policy and similar information for the recommended alternative. No system can be approved for fielding without evaluation of the TRADOC approved critical issues such as training and logistics concepts, RAM and operational effectiveness.
- b. Requests originating within TRADOC for waiver of any directed user tests or any portions of such tests will be formalized by the TRADOC proponent and forwarded through CAC to the ADCSTE (Resources & Policy) for approval. The requests will be processed by the ADCSTE to obtain approval from the appropriate approval authority in accordance with AR 71-3.
- c. TRADOC test organizations will not finalize test design plans (TDP) when any of the required test support packages, the IEP or issues and criteria (as listed in the "milestones" of the applicable OTP) are either missing or incomplete. A waiver request will be submitted to ADCSTE (Resources & Policy) by CAC or the TRADOC proponent (via CAC) for all or part of any of the preceding which may not be available for a programed test if there are compelling reasons for proceeding with test planning as scheduled. If disapproved, the TDP will not be completed until a resolution is achieved. (NOTE: When all elements of

- a TSP are not required, the OTP for the test will indicate in the milestone list the elements which are not required.)
- d. TRADOC test organizations will not initiate testing for an OT II or subsequent OT without a complete system support package (SSP) unless the materiel developer has obtained a waiver in accordance with AR 700-127. The tester will notify the proponent, ADCSTE (Resources & Policy) and the materiel developer should this condition occur.
- 2-8. <u>Termination of testing</u>. Request for approval of termination of testing will be initiated by the TRADOC test organization if any one of the following should occur:
- a. The test item or system appears grossly deficient with little chance of meeting major requirements.
- b. The test item or system poses undue safety hazards to personnel or equipment.
  - c. It becomes evident that critical test information cannot be attained.

The decision to suspend the test will be made by the test organization. The test organization will forward to ADCSTE (Resources & Policy) its recommendation concerning termination of test along with supporting rationale. Based on the test organization's recommendations and supporting documentation, ADCSTE will take appropriate action to make a decision concerning approval of the request to terminate the test.

\*2-9. Test Schedule and Review Committee (TSARC). The TSARC is the formal process through which OTP are approved and included in the Five Year Test Program (FYTP). The committee meets semiannually between March-July and September-January as shown in figure 2-1 (the TSARC Cycle). ADCSTE (Resources & Policy) initiates the process by chairing a TRADOC working TSARC in March and September with representatives from DA, DARCOM, FORSCOM, OTEA, TRADOC proponent centers/ schools, TRADOC test organizations, USALOGC, USATSC, USASSC (NCR), USACAC and other agencies. In preparation for the TRADOC TSARC, the test organizations prepare revisions to current FYTP OTP and new OTP for presentation at the TRADOC meeting. Following the TRADOC working TSARC, appropriate revisions are made to the OTP, and are forwarded to OTEA for use at the OTEA working TSARC conducted in May and November. ADCSTE (Resources & Policy) will publish and distribute minutes of the TRADOC TSARC normally two weeks afterwards. ADCSTE (Resources & Policy) represents TRADOC at the OTEA working TSARC. Following the OTEA working TSARC, a DA General Officer TSARC is held in June and December to consider those issues not resolved during the OTEA working TSARC. The GO TSARC then recommends approval of the FYTP to ODCSOPS DA. In those cases where an OTP must be approved between scheduled TSARC, procedures for submission of out-of-cycle OTP are at paragraph 2-1c(2) of AR 71-3. TRADOC out-of-cycle OTP will be sent by test organizations to TSARC members for approval with an appropriate statement of test urgency over general officer signature. If an out-of-cycle OTP needs to be staffed and a general officer is not available for signature, the OTP along with a statement of urgency should be sent to ADCSTE (Resources & Policy) for signature and distribution to TSARC members.

	MAR	TRADOC WORKING TSARC
DRAFT FYTP	APR	
OTEA WORKING TSARC	MAY	
GO TSARC	JUN	
FYTP PUBLISHED	JUL	
	AUG	
	SEP	TRADOC WORKING TSARC
DRAFT FYTP	OCT	
OTEA WORKING TSARC	NOV	
GO TSARC	DEC	
FYTP PUBLISHED	JAN	

FIGURE 2-1. THE TSARC CYCLE.

- 2-10. <u>Coordination and distribution of user test documentation</u>. Guidance for the coordination and distribution of test documentation are at appendixes D and E, respectively.
- a. Test resources, compressed schedules and tailored acquisition strategies require that user test data be made available to all involved participants (other testers, evaluators, materiel developers, combat developers, training developers, etc.) in a timely fashion. Normally, the test report (TR) will provide this data. Test organizations may, at their discretion, release raw test data to other agencies on a case-by-case basis, prior to publication of the test report. However, in those cases where the test organization will not release such data, the agency requesting the information may make a formal request to ADCSTE (Resources & Policy) for data release. External TRADOC agencies requesting raw test data will submit formal requests directly to ADCSTE. Whenever raw test data is distributed, it will be accompanied by the test organization's planned data analysis techniques and any imposed restrictions or limitations.
- b. TRADOC proponents and test organizations will coordinate OT closely with DT counterparts. Proponents and test organizations will initiate early exchange of interim or draft T&E plans, if available. TRADOC test organizations and proponents may provide comments on DT plans direct to the DT organizations. Materiel developers are encouraged to monitor user testing.
- c. The TRADOC liaison officer to HQ TECOM will insure that appropriate TRADOC organizations are on the TECOM distribution list for receipt of directives, plans, final test reports and IER. Recipient TRADOC organizations will forward concurrence or recommended changes to DT plans to TECOM within 30 days or as requested.
- d. The TRADOC liaison officer to OTEA will insure that appropriate TRADOC organizations are on the distribution list for IEP, OTP, test plans, final reports and IER from OTEA. TRADOC organizations will forward concurrence or recommended changes to OTEA within 30 days or as requested.
- 2-11. <u>Integrated testing</u>. When two or more TRADOC test organizations are participating in a test, an executive test organization will be designated by ADCSTE (Resources & Policy). Responsibilities of the executive test organization are:
  - a. Preparation of the TDP with assistance from supporting organizations.
  - b. Coordination of draft TDP with each participating test organization.
- c. Preparation of the test report with support from the other participating test organizations.
- d. Referring conflicts among participating test organizations to the DCSTE for resolution.

# 2-12. Testing Logistics Supportability (LOG S) and RAM.

a. Guidelines on the concept and methodology for operational test and evaluation of logistics supportability and RAM are contained in AR 71-3, AR 700-127 and AR 702-3. OT II will be conducted by troop units using engineering

development prototype equipment and TRADOC approved scenarios, tactics, training (conducted by appropriate TRADOC schools), techniques, logistics, concepts, doctrine and threat. Additionally, for OT II, the logistics support system tested, less supply of peculiar parts, will be identical to the system planned to support the tactical item when fully fielded.

- b. Testing of the logistics support system should be as extensive as practical. As a minimum, the following guidelines should be followed:
- (1) During OT I, elements of operator and organizational maintenance and appropriate MOS from the direct support (DS) and entry into general support (GS) maintenance element will be tested to the degree possible. This test should be designed to yield maximum information on personnel, proponent school training, MOS requirements, maintenance concepts and organization, draft technical manuals, support and test equipment, and other elements of logistics support.
- Normally, OT II shall address all maintenance through the general support level using Army school trained military personnel (AR 702-3). OT II must be sufficiently comprehensive to fully evaluate all elements of integrated logistics support (e.g., maintenance plan, support and test equipment, technical data, supply support facilities, computer resources, manpower, transportation and handling, personnel and training) to yield data with which to make decisions relevant to production and deployment. In general, the following maintenance activities will be observed: all scheduled maintenance actions at all levels, all operator and organizational level unscheduled actions, and substantial sampling of all major, unique, and significant DS and GS actions. OT II will be designed and conducted so that maintenance requirements occur as a natural result of testing (during tactical/operational phases). The testing may be extended for logistics assessment by continuation of simulated tactical operations. If necessary, a period of maintenance evaluation may be conducted by simulating malfunctions and maintenance requirements in order to observe additional maintenance actions.
- (3) Logistics assessments during FDTE and CEP depend upon test issues and objectives and are on a case-by-case basis.
- c. Reliability, availability and maintainability (RAM) test evaluations will be designed to provide RAM data required to fill the needs established by the test objectives, issues, criteria and failure definition/scoring criteria (FD/SC). Planned operations will conform to the operational mode summary/mission profile (OMS/MP) constraints. OT RAM data collection programs will be designed to collect suitable data which addresses operational RAM performance. OT I, OT II and other user tests, when RAM is an issue, should be adequate in length to provide evidence of needed improvements and allow for the exercise of the maintenance/logistics system. OT II will be designed using statistical techniques which apply the criteria and risks specifications to insure that the test will provide statistically valid results concerning the operational RAM of the system. Guidances are:
- (1) Waiver of OT II RAM testing. For TRADOC conducted OT II of systems other than single-shot-items (used only once such as rocket, missile, etc.), the proponent will submit a request for waiver of RAM testing when any one of the conditions cited below cannot be achieved. Waiver request will be submitted through USALOGC and USACAC to ADCSTE (Resources & Policy) for approval.

Justification will address factors such as long life and high reliability requirements, possible aggregation of DT test data with OT data, other data sources and low quantity procurements.

- (a) Test time will be accumulated on at least three items.
- (b) A minimum of three test items will each accumulate test time equal to at least 1.5 times the minimum acceptable value (MAV) and operate past the scheduled organizational/DS/GS maintenance points (this excludes daily checks and services).
- (c) The total test time will be sufficient for designing a test to the statistical risk levels specified in the IEP.
- (2) Data collection. Data collection and distribution procedures for OT I and OT II will be designed to record and provide essential data to support the DT and OT evaluations and scoring conferences. Additional data requested may be collected and furnished on a noninterference basis. System Performance Reports (SPR) will be used to report RAM test incidents (app B).
- 2-13. Testing of training and training support. TRADOC testing of training and training support aspects of systems will be focused on specific individual and collective tasks. Accordingly, the proper testing of training must be preceded by a thorough job/task analysis to accurately describe new tasks, conditions, and standards or verify the appropriateness of existing task information.
- a. The TRADOC training developer (TSC) will insure that a job/task analysis is conducted in accordance with TRADOC Pam 350-30 and TRADOC Cir 351-4 during the conceptual phase to identify tasks selected for training and related training test issues. To complete this analysis, some testing may be required prior to OT I.
- b. A new equipment training test support package for high risk tasks jointly developed and agreed to by the TRADOC proponent, training developer and DARCOM will be evaluated during OT.
- c. OT II will be sufficiently comprehensive to address all elements of the appropriate training test support package (e.g., soldier manuals, ARTEP, training devices, embedded training components, training ammunition/targets, technical documentation and training extension materials). The testing and analysis of alternative training concepts or training devices is preferably accomplished by training effectiveness analysis (TEA) testing in separate OT prior to the OT of the hardware system. The training subsystem tested during OT II will be that which is intended to be fielded with the hardware system at IOC. OT II may provide data for assessing the effectiveness of that training subsystem to support CTEA requirements.
- d. If significant training/training support deficiencies are found in OT II, corrections will be made and an appropriate test of training repeated during OT IIA, IOC-FDTE or FOE.
- 2-14. <u>Airborne and airmobile testing</u>. Aircraft which are to be used in support of air movement operations and systems which require one or more of the following capabilities will be tested by the US Army Airborne Board for acceptability of

these methods; internal air transport in USAF aircraft, internal and external air transport in US Army helicopters, low velocity air drop, and low altitude parachute extraction system (LAPES) delivery. Clothing, equipment and rations worn or carried by individual parachutists while jumping from aircraft and then carried by the individual after clearing the drop zone will normally be tested by US Army Infantry Board. Airborne and airmobile testing will be accomplished prior to the full production decision whenever possible. For developmental systems, this will be accomplished during a subphase of OT II. For NDI acquisition, the required airborne and airmobile tests will be accomplished prior to the NDI classification IPR.

- 2-15. Cost and operational effectiveness analysis (COEA)/training effectiveness analysis (TEA). The user test process complements and assists the testing interface with COEA/TEA. User testing, either OT, appropriate FDTE, or other tests can be used to provide necessary data for COEA/TEA. To insure that user testing will generate these data, COEA/TEA proponents must provide their data needs to the test organization in a timely manner; i.e., prior to initiation of the test design plan. These TEA data needs will take the form of a study plan provided by the test proponent and/or TRASANA. The operational tester is responsible for providing data to the proponent's training effectiveness analysis so that TEA study schedules can be met. Training effectiveness issues will be included in the IEP by the TEA study team. Additionally, COEA/TEA and other analyses often identify issues which need to be answered during testing. These issues should be included in the independent evaluation plan. Milestone schedules for COEA/TEA will be compatible with test schedules in order to facilitate both the collection and analysis of these data.
- 2-16. <u>Direct communications</u>. Direct communication and liaison among TRADOC proponents, cooperative proponents, test organizations, external headquarters and other services (when joint user testing is being conducted) is authorized and encouraged on matters concerning:
- a. Development of draft IEP, OTP, TSP, TDP, CTP input, and the coordination of these documents.
- b. Provisions of test resources specified in the OTP and approved by the TSARC. (Resource requirements delineated in OTP must be coordinated within TRADOC and appropriate MACOM prior to the TRADOC TSARC.)
- 2-17. Test integration working group (TIWG). TIWG are formally chartered in accordance with DA Pam 70-21, and chaired by the responsible material developer, to provide coordination and integration of tests of major, DAP and category 1 nonmajor systems. TIWG may also be established for other nonmajor systems jointly selected by TRADOC and DARCOM. DARCOM proponents for systems not justifying TIWG have been requested to provide DT plans or coordination drafts to TRADOC. TRADOC liaison officers to DARCOM commodity commands will assist in identifying the proper TRADOC recipient of these plans.
- a. TRADOC membership at TIWG for major, DAP and category 1 nonmajor systems will be--  $\,$
- (1) Principal (combat developer); for TSM systems TSM; Other systems-HQ TRADOC, DCSCD (appropriate TRASSO or if TRASSO is not present, the TRADOC proponent becomes the principal member).

- (2) Principal (trainer) US Army Training Support Center.
- (3) Associate member proponent school/center.
- (4) Associate member USACAC (evaluation matters).
- (5) Associate member US Army Logistics Center (RAM/ILS matters).
- (6) Associate member US Army Soldier Support Center (NCR)(IPS matters).
- (7) Associate member TRADOC test oranization.
- (8) Associate member US Army TRADOC Systems Analysis Activity (training effectiveness analysis matters).
  - (9) Associate member other command elements as appropriate.
- b. TRADOC membership at TIWG for category 2, 3 and 4 nonmajor systems will be--
- (1) Principal (combat developer) for TSM systems TSM; other systems HQ TRADOC, DCSCD (appropriate TRASSO or if TRASSO is not present, the TRADOC proponent becomes the principal member).
  - (2) Principal (operational tester) TRADOC test organization.
  - (3) Principal (operational test evaluator) USACAC.
  - (4) Principal (trainer) US Army Training Support Center.
  - (5) Associate member US Army Logistics Center (RAM/ILS matters).
  - (6) Associate member US Army Soldier Support Center (NCR)(IPS matters).
  - (7) Associate member other TRADOC elements as appropriate (proponent).

### CHAPTER 3

### TEST AND EVALUATION DOCUMENTATION AND ADMINISTRATION

### RCS ATTE-3

- 3-1. <u>General</u>. This chapter describes minimum policies, guidance and submission requirements for administrative documentation and reporting in executing or supporting test programs. Figure 3-1 depicts TRADOC test documentation responsibilities for OTEA and TRADOC tests.
- 3-2. Minimum test documentation. Minimum documentation for operational test and evaluation (OT&E) shall consist of the independent evaluation plan (IEP), test support packages (TSP), test and evaluation master plan (TEMP)(Defense Systems Acquisition Review Council (DSARC) controlled systems), outline test plan (OTP), test design plan (TDP), coordinated test program (CTP), operational test readiness statements (OTRS), safety release, system performance reports (SPR), test report (TR), and independent evaluation report (IER). The IEP is the basic document for establishing the need for a test program. It guides test organization development of the OTP and TDP and, more importantly, provides a coordinated plan for accomplishing a TRADOC independent evaluation of the system or concept undergoing evaluation. The issues and criteria contained in the IEP provide broad test parameters and are the basis for development of the OTP. The collective contents of the IEP, OTP and TSP provide the majority of information, issues, criteria, and parameters required for preparation of the TDP and detailed test plan (if required), test execution, and preparation of the test report. The test cycle concludes with an IER based on an analysis of the TR, COEA/TEA (if available), contractor tests, other studies, analyses and test data. Subsequent paragraphs discuss these documents, submission procedures and the overall OT&E process. It should be noted that FDTE normally do not require CTP or TEMP and that concept evaluation (CEP) documentation is purposely held to a minimum.

# 3-3. <u>Independent evaluation (IE)</u>.

a. DOD Directive 5000.3 and implementing Army regulations (AR 71-3 and AR 1000-1) require that a major field agency, separate and distinct from the materiel developing or using agency, provide independent evaluation of materiel systems in the system acquisition process. The TRADOC independent evaluator evaluates the total system (i.e., hardware, software, doctrine, logistics, training and personnel) examining all operational issues to provide a comprehensive TRADOC IER and supporting documentation to the IPR in accordance with paragraph 3-20 of AR 71-3. This will be used to support the development of the TRADOC position statement to the decision review (DSARC/ASARC/IPR). Although the IE is frequently identified with the planned OT to support the final decision and will address the adequacy of testing, it uses all available data sources (e.g., DT, OT and RDTE data and reports, COEA/TEA, studies and analysis) in developing the TRADOC evaluation. The IE is a continuing process based on an approved IEP that must evolve as new information is obtained and issues developed, changed, or resolved. An approved IEP is the basis for development of the outline test plan (OTP) and test design plan (TDP) for the scheduled OT.

The TRADOC IEP is prepared by the proponent with assistance from the LOGC and logistic oriented school(s), the Soldier Support Center, the Training Support Center, and any designated cooperative proponent(s). The IEP is approved for TRADOC by the Combined Arms Center (CAC). Following approval, the proponent maintains a current IEP throughout the evaluation process. The IEP serves as the basic planning document for developing the IER at the completion of the acquisition cycle. For each phase of testing, CAC will review the IEP and supporting documentation as needed to--

- (1) Provide a TRADOC approved IEP to the test organization.
- (2) Assure compatibility of OTP, TDP and test report with the current approved IEP.
  - (3) Assure timely updating of the IEP as pertinent new information evolves.
- b. The Army will evaluate joint test (JT) independently from DOD and the other military services whenever IE are deemed essential to Army interests. The Combined Arms Center is responsible for initiating and conducting Army evaluations of JT. CAC will prepare, coordinate, and implement the IEP with assistance from TRADOC agencies and other MACOM as needed. CAC will establish and supervise an evaluation team for each IE and approve the IER prepared by the team and forward it through HQ TRADOC to DA for final approval.
- c. Requirements for independent evaluation plans and reports for FDTE vary substantially dependent upon the purpose of the FDTE, treatment of the FDTE in other plans and reports, and constraints on TRADOC management of the FDTE.
- (1) FDTE conducted in support of a particular system acquisition program will be evaluated in the context of the IEP and IER for that program (a above). Thus a separate independent evaluation report for such an FDTE normally is not needed. An evaluation plan (EP) (RCS ATTE-3) will be developed in place of a formal IEP to guide development of the OTP and TDP by the test organization. An EP is a simpler, less formal document showing the purpose of the test, issues and criteria, an outline of the scope and tactical context desired by the test proponent, and a listing of essential milestones.
- (2) FDTE conducted in support of various combat and training developments studies normally are evaluated in the context of the support study effort and do not require a separate independent evaluation report. However, they normally must be initiated by an EP such as that described in (1) above. The stated purpose for such an FDTE must indicate clearly how the results of the test will be used.
- (3) A separate IER is required for any FDTE of critical concern to TRADOC, the results of which will be used to support a decision review by DA or other MACOM. A comprehensive IEP is required for such an FDTE to establish a coordinated common understanding of the test and evaluation needs and to provide a clear plan for providing an approved TRADOC IER.
- 3-4. Outline test plan (OTP). The OTP contains administrative and test cost and resource information, test purposes and objectives, major milestones, and

estimated resource requirements. OTEA is directly responsible for development of the OTP for major, DAP and category 1 nonmajor systems. For TRADOC tests, the OTP (RCS ATTE-3) will be prepared by the TRADOC test organization in coordination with the proponent and it will reflect the guidance of an approved IEP. However, for category 2 nonmajor systems OT II, the test objectives, scope, and tactical context will be provided by OTEA after receipt of the draft IEP (CAC) and the approved requirements document. The test organization is responsible for coordinating with all involved and supporting organizations regarding the "required by" dates for all documentation and inputs listed in the OTP milestones at figures 3-2 and 3-3. Test organizations will, upon receiving concurrence or a statement of nonconcurrence from the proponent, forward the OTP to the ADCSTE for review and submission to the TSARC, with an information copy to the proponent. Once the OTP are approved and included in the FYTP, they become formal tasking documents. Since the test organization is the POC for all TRADOC functions and requirements relative to developing and preparing OTP, the test organization will immediately notify DCSTE and ADCSTE, HQ TRADOC of any perceived or anticipated deviation from these approved taskings. This notification shall include pertinent reasons for any change to the approved plan. Where scheduling problems, resources or other conflicts exist, recommendations will be provided or resolved by HQ TRADOC. Whenever an OTP is submitted as a resume sheet for a CEP, it will be submitted to the Concepts Evaluation and Review Committee (CEPSARC), HQ TRADOC.

- Coordinated test program (CTP) and test and evaluation master plan (TEMP). The CTP is a joint combat/training/materiel developer test planning document. The format and content of the CTP are shown in DA Pam 70-21. TRADOC proponents are responsible for providing user testing needs into the CTP (RCS ATTE-3) for category 2 and lesser nonmajor systems. However, this should be a joint proponent center/school and test organization effort. Requests from DARCOM for CTP input should be addressed to the designated TRADOC proponent with information copy to the designated TRADOC test organization. The test organization will provide full support to the proponent regarding TRADOC input to the CTP. Proponents will normally be allowed at least six weeks, exclusive of mailing time, to respond by forwarding CTP portions to the material developer. Nonreceipt of a DARCOM request for TRADOC's CTP requirements does not relieve the proponent center/school or the assisting test organization of the requirement to participate in formulation of the CTP. Both proponent and test organization are encouraged to exercise initiative regarding TRADOC participation in the CTP process. For nondevelopment items (NDI), TRADOC proponents/test organizations/ integrating centers must insure that a CTP is developed and concurred with prior to the special IPR (SIPR). New materiel systems directed by DSARC will be developed under a TEMP (DOD Directive 5000.3). Normally, these will be OTEA responsible tests. However, limited TRADOC proponency, training or issues and criteria input will be required as appropriate (see definition of TEMP in appendix A). The TEMP serves as the overall test and evaluation plan, prepared as early as possible in the acquisition process, and designed to identify and integrate objectives, responsibilities, resources, and schedules for all test and evaluation to be accomplished prior to the subsequent key decision points.
- 3-6. TRADOC test support packages (TSP). The TRADOC proponent is responsible for developing, coordinating and assembling the combat developer's and trainer's test support packages (RCS ATTE-3). The appropriate TRADOC system manager (TSM) is responsible for insuring that the proponent accomplishes this for TSM managed systems. The TSP will reflect latest approved doctrine, threat, organization

and training concepts to be fielded with the system. Guidance on preparation of the TSP is contained in paragraph 3-24 of AR 71-3. Development of the TSP will be supported by the logistics oriented schools and any cooperative proponents. The proponent will distribute the initial draft TSP for review and comments to the test organization, Training Support Center, Soldier Support Center (NCR), LOGC, cooperative proponent and logistics oriented schools. Information copies will be supplied HQ TRADOC (ATTE-R and ATCD), Ft Monroe, VA: HO TRADOC (ATTE-ZA), Ft Hood, TX and CAC (ATZL-CAT-E). Comments on the TSP will be provided to the proponent within 30 days of its receipt. The proponent will accommodate the comments and will submit six copies of the final coordinated draft TSP to the appropriate system directorate within the Deputy Chief of Staff for Combat Developments (ATCD), HQ TRADOC for approval. Concurrently, copies will be forwarded to the organizations with whom the initial draft TSP was coordinated. If these organizations have additional comments, they will submit them to HQ TRADOC (ATCD-appropriate TRASSO) within 15 working days after receipt of the final draft TSP; otherwise, their concurrence will be assumed. Upon receipt of the final draft TSP at HQ TRADOC, the designated TRASSO will staff appropriate elements of the TSP with Organization Directorate, Human Dimensions Directorate, Studies and Analysis Directorate, other DCSCD materiel sections (if a cooperative proponent is involved) and DCSDOC and will provide an information copy to DCST (ATTG-AE). The TRASSO will also resolve any additional comments received from the field. HQ TRADOC (ATCD) will approve the final draft TSP within 30 days after receipt and will forward a letter to the proponent stating TRADOC approval or stating action to be taken pending approval by HQ TRADOC. The proponent will distribute the TRADOC approved TSP in accordance with appendix E. The approved TSP must be provided to the test organization in accordance with the milestone schedule stated in the approved OTP in the DA Five Year Test Program (FYTP). The test design plan (TDP) will not be submitted nor approved without the necessary elements of the approved TSP. Failure to meet the required date as stated in the approved OTP milestone schedule will be considered as grounds for delaying the test.

Test design plan (TDP). The TDP is a formal document approved by the DCSTE, TRADOC which states the circumstances for test, conditions of the test, requirements for data, analysis logic and a feasible execution concept. The TDP (RCS ATTE-3) is developed by the test organization and coordinated with the proponent, LOGC, Soldier Support Center (NCR), Army Training Support Center, TRADOC TRASSO and Safety Officer, CAC, logistician, materiel developer, designated DCSTE representative and other appropriate entities <u>prior to forwarding to the DCSTE</u>, TRADOC for approval. DCSTE, TRADOC will approve TDP for category 3 and lesser systems except designated CEP test design plans which will be approved by the proponent. TDP for category 2 nonmajor systems will be reviewed and forwarded by the DCSTE, TRADOC to OTEA for approval. Upon approval of the TDP, the test organization will normally develop a detailed test plan (DTP) based on the TDP. The DTP is an internal working document of the test organization and is not staffed or approved externally. When detailed planning (DTP) identifies the need for a change to the TDP, changes will be submitted to the DCSTE, TRADOC for approval (category 3 or less) or through the DCSTE to OTEA for approval (category 2). Approved changes will be attached as amendments to the TDP. Unless specific exception is made by the DCSTE, TRADOC, no test will be initiated without an approved TDP or waiver.

- 3-8. Operational test readiness statements (OTRS). For OTEA conducted OT and FOE where TRADOC is the combat developer and/or trainer, the proponent school will provide OTEA the combat developer and trainer OTRS (RCS ATTE-3) required by paragraph 3-25b(2) of AR 71-3 and as scheduled in the OTP milestones. For TRADOC conducted OT, FOE and IOC-FDTE, OTRS required by paragraph 3-25, AR 71-3, will be provided by materiel developer, combat developer, and trainer in accordance with OTP milestone schedules. For TRADOC tests, delivery of approved TSP elements will constitute combat developer and training developer OTRS required by paragraph 3-25b(2)(a) of AR 71-3. No test will be started until the trainer certifies that player personnel or troops have satisfactorily completed training in accordance with concepts provided in the TSP as required by paragraph 3-25b(2)(b) of AR 71-3.
- 3-9. Force development test and experimentation readiness statement (FDTRS). For TRADOC conducted FDTE other than IOC-FDTE, which is addressed in paragraph 3-8, the proponent center/school will provide a statement of readiness (RCS ATTE-3) in accordance with the OTP milestone agreed to by the proponent and the test organization. Depending on the purpose of the FDTE, the FDTRS elements may vary substantially from those of an OTRS.
  - a. As a minimum, the FDTRS will include:
- (1) A statement that doctrine, organization, procedures, and concepts presented in the test support package describe completely the concepts and implementing procedures to be tested, and indicating the date the training concepts were provided to the designated player units. Normally, this is accomplished by delivery of the approved TSP elements.
- (2) A statement that the player troops or units have satisfactorily completed training in accordance with concepts provided in the TSP.
- b. The FDTRS for FDTE requiring use of a nonstandard materiel system or item for which there is no approved requirement will include the following elements from the procuring command.
- (1) A safety release that the item or system is safe for use by typcial user troops when accompanying safety procedures are followed.
- (2) A statement that the maintenance and logistics support to keep it operational during the test represents ordinary military resupply procedures, or alternately a detailed statement of the special support procedures required and how the support will be provided.
- c. The FDTRS elements for FDTE conducted in support of a particular system acquisition program will normally be the same as OTRS elements applicable to the phase of system development in which the FDTE is to be conducted.
- d. The elements and implementing milestone dates of the FDTRS will be determined jointly by the proponent and the test organization during development and coordination of the OTP.
- 3-10. <u>Safety releases</u>. Safety releases are required for all TRADOC tests and will be provided by the TRADOC Safety Officer, DCSENGR, TRADOC. OTP for all tests will indicate that the materiel developer will provide the DARCOM equipment

safety release to TRADOC's Safety Office 30 days prior to start of any test player training or TRADOC test participation. The safety office will evaluate the materiel developer's safety release, provide any TRADOC operational restrictions and issue a TRADOC safety release. The TRADOC safety office will forward the safety release to the test organization within 15 days after receipt of the materiel developer's statement. Test personnel training, test, maintenance or any participation by TRADOC personnel will not start until the TRADOC safety release is received by the test organization.

3-11. System performance reports (SPR). TRADOC test organizations will prepare and submit SPR (RCS ATTE-2) on all test incidents and malfunctions as required by appendix B of this regulation. SPR for CEP and customer tests are not required unless specifically directed by the TRADOC tasking directive or LOE.

### 3-12. Test reports (TR).

- a. Formal interim reports will be prepared in exceptional cases only as directed by HQ TRADOC.
- b. Final test reports (TR) (RCS ATTE-3) will be prepared and distributed by the test organization. Assistance in preparing the report may be obtained from other appropriate TRADOC organizations that supported selected test phases during test execution. However, report findings will be prepared independently to insure objectivity of the test report and independent evaluation report (IER). While it is fully understood that test organizations have vast experience in their respective disciplines, it must be even more clearly understood that the test report will be absolutely limited to reporting only data collected during the test, and analysis of that data. The test report will not include any suitability type statement such as suitability or acceptability for production, deployment or continued development. Since conclusions and recommendations regarding system suitability must be based on all available data on the system. the independent evaluation report, which summarizes all available data, is the appropriate document for suitability statements. However, qualified test organization personnel are authorized to submit their individual professional judgements, as regards conclusions and recommendations concerning a system, in separate correspondence directly to the independent evaluator. In this event, the TRADOC evaluator is required to provide a formal answer to the originator of this correspondence. Findings, observations, comments/logical assessments and suggested improvement -- based solely on and addressing only data collected during the test -- are included in the test report (executive summary, main body, or separate annex) as deemed appropriate.
- c. The OT report will be distributed in accordance with the approved distribution list (app E) which is always the last appendix in both the TDP and TR. FDTE report distribution will be determined by the test proponent.
- d. Organizations conducting COEA/TEA and proponents may be permitted to witness and obtain validated data from tests in progress only on a noninterference basis and at the discretion of the test organization. Upon nonconcurrence from the test organization for external personnel to obtain raw test data or witness test conduct, a formal request by the external agency to the DCSTE. TRADOC may be submitted.

- 3-13. Independent evaluation report (IER). The IER (RCS ATTE-3) provides the assessment of the system's ability to satisfy military requirements based on issues addressed during testing, the COEA/TEA, studies, analyses, and other relevant data. Consideration of the adequacy of testing during that phase in the system's development may be included. The IER, as part of the materiel acquisition process (MAP), is prepared at the end of a development phase to support a decision milestone. It is not written for a specific test in the system acquisition process. The exception to this statement is the IER, when directed, of an FDTE conducted to support a force development action not associated with system acquisition. The IER considers all available information and becomes the foundation for the command's decision review position. Independent evaluations of DT which address OT operational issues will be reported in the same manner as separate OT evaluations. IER are considered with other supporting documentation by the IPR/ASARC/DSARC.
- a. When testing discloses no significant system deficiencies, and the independent evaluation indicates that deficiencies identified during prior testing were corrected and validated by testing, a statement to this effect will be included in the IER. Should the system, as corrected, prior to and during test, fail to meet approved requirements but still be considered suitable for deployment, pertinent recommendations with supporting rationale will be included in the IER. In those cases where significant system deficiencies continue to exist following testing, the IER will contain a statement to that effect and recommend a resolution to the decision review authority. In all cases, the IER and supporting documentation will be provided to the IPR in accordance with paragraph 3-20 of AR 71-3 to support the TRADOC decision review position.
- b. To support development of the IER, the RAM and logistics portions will be provided by LOGC or an appropriate logistics oriented school, if designated by LOGC, to CAC. When input is provided by a logistics oriented school, their portion must be approved by LOGC prior to being provided to the proponent. The proponent will then staff the IER with LOGC for review and comment prior to submitting it to CAC for approval. In like manner, the IER should reflect supportive data resulting from staffing with the Soldier Support Center (NCR), Training Support Center, designated cooperative proponents, TRADOC TRASSO, OTEA, and other user testing oriented organizations. (NOTE: Since AR 71-3 defines OT independent evaluation as clearly independent of the materiel developer and using command, IER will not be coordinated with these entities.) Consideration of comments received during coordination will be reflected in a coordination appendix to the IER. Final draft IER will be forwarded to CAC for approval in sufficient time to allow distribution to the decision review principals at least 2 weeks prior to scheduled IPR/ASARC/DSARC.
  - c. The USACAC provides HQ TRADOC approval of IE for TRADOC assigned tests.
- 3-14. Concept evaluation program (CEP). CEP is the TRADOC innovative testing program which is managed by ADCSTE, TRADOC and funded by a specified TRADOC controlled RDTE account. As an RDTE funded program, all CEP must have a materiel orientation. It provides a quick reaction and simplified process for resolving combat and training development issues, firming up requirements documents, and determining the operational and training potential of materiel

items. CEP also supports procurement of existing items (e.g., commercial), necessary material modification or fabrication or prototypes for use during CEP testing.

- a. CEP is formally initiated by nomination of CEP candidates (with test locations, times and other resources needed) by submission of a resume sheet (RS) (RCS ATTE-3) to ADCSTE, TRADOC NLT 30 June of each calendar year. If a proponent nominates more than one, the CEP nominees should be prioritized. All RS nominations from all TRADOC activities will be reviewed and approved by the annual Concept Evaluation Program Schedule and Review Committee (CEPSARC). HQ TRADOC convenes this committee during the 4th Quarter of each fiscal year. If a requested CEP is time sensitive, the RS may be submitted at any time and the review and approval process will be expedited on a case-by-case basis. Each proponent will submit a proposed list of CEP candidates to ADCSTE (Resources & Policy), TRADOC NLT 31 December of each year. RS are prepared by the designated CEP proponent with assistance from a test organization (if collocated with the proponent). The RS will be prepared and submitted in the format shown in appendix C.
- b. Other documentation unique to CEP, besides the RS, are the final test report and proponent evaluation (PE). Thus, the only documents normally required for CEP are the RS, final TR from the test organization (due within 30 days after test), and the PE (due within 30 days after receiving the TR). However, at the discretion of the test organization, a TDP may be prepared and provided to the sponsor or proponent. The PE will be in the form of a letter officially forwarding the TR to ADCSTE, TRADOC and will specifically address follow-on actions and make firm recommendations. HQ TRADOC may require more extensive documentation for selected CEP tests. Conditions which might dictate such action include elevated costs of a single CEP, command or Army interest in a particular CEP or other sufficient reason. In these instances, specific instructions will be provided by the ADCSTE (Resources & Policy), TRADOC.
- c. Excess test items or equipment obtained under CEP will be reported to ADCSTE, TRADOC for disposition instructions. Disposition instructions will be submitted for each item reported. The proponent evaluation (PE) of the test report should include a recommendation regarding disposition. General disposition procedures are shown in paragraph 3-15.
  - d. Funding for approved CEP will be managed as follows:
- (1) Funds issued for CEP projects will be used specifically for that project and not redirected for any other purpose.
- (2) CEP items will be procured by the proponent in accordance with applicable procurement regulations. Sole source procurement must be authorized under appropriate regulation and justified as necessary. Sole source procurement is only to be used when absolutely essential. Test items should be loaned or borrowed whenever possible. Procurement may be initiated upon issuance of funds by HQ TRADOC on DA Form 1324 (Funding Authorization Document) or DA Form 2544 (Intra-Army Order for Reimbursable Services) if funds are provided to organization outside of TRADOC. CEP items will be posted to the proponent/parent organization mission property book and will adhere to the accounting

procedures of AR 710-2. The items will be located in a separate section of the property book and shown as "CEP item." Installations using mechanized accounting will develop local procedures for accounting or inventory procedures.

- (3) Upon completion of the approved CEP project, excess funds will be immediately reported to the ADCSTE (Resources & Policy), TRADOC for reallocation.
- e. The results of CEP will be published biannually in a TRADOC CEP compendium by the ADCSTE. The compendium will include a summary of significant results and a copy of the executive summary for each completed CEP test and evaluation.

### \*3-15. Property documentation for equipment and instrumentation.

a. Documentation of research, development, test and evaluation (RDTE) equipment. Items of equipment required by an RDTE activity/unit, and by a tenant non-RDTE TDA activity located at and supporting an RDTE host installation, will be or not be documented in their TDA as follows:

### (1) Will be documented:

- (a) HQDA-controlled equipment (para 2-19b, AR 310-34) required for support of base operations at RDTE installations. Includes, but not limited to, facility engineer, message center, security, motor pool, installation maintenance, and housekeeping equipment.
- (b) HQDA-controlled equipment (para 2-19b, AR 310-34) required for support of RDTE projects or specific test requirements for a period exceeding 2 years.
  - (2) Will not be documented:
- (a) Equipment procured with RDTE funds including equipment purchased with other than RDTE funds when it is reimbursed with RDTE funds.
  - (b) Special purpose equipment (AR 70-6) required for RDTE activities.
- (c) SB 700-20 (chapter 2) items of materiel obtained under the provisions of AR 70-1, AR 70-10, or AR 705-24.
- (d) HQDA-controlled equipment (para 2-19b, AR 31.0-34) required for support of RDTE projects or specific test requirements for a period of less than 2 years. Equipment required for any period less than 2 years will be obtained on loan from the appropriate materiel readiness command (MRC). The RDTE or OPA appropriation will reimburse the MRC for items consumed in RDTE and will bear the cost necessary to return the item to MRC in serviceable condition prior to or upon completion of the loan period.
- (3) Programing, budgeting, and property book accounting for RDTE equipment used by the tenant non-RDTE TDA activity are responsibilities of the RDTE host activity. This equipment will not be procured or reimbursed from the tenant account.
  - b. Equipment used for experiments and tests.
- (1) Experiments and tests specifically include development testing, operational testing, product improvement program testing, production acceptance

testing, nondevelopmental materiel system testing, force development testing and experimentation, technical feasibility testing, operational feasibility testing, innovative testing, on-site user testing, supportive testing, and special materiel testing.

- (2) Both standard and nonstandard equipment used for experiments and tests must be frequently modified or reconfigured into different system arrangements to support on-going and/or subsequent requirements that are unique to a specific test. In view of this, it would not be cost effective to restore the equipment, including instrumentation, to its original configuration merely for documentation purposes nor would it be cost effective to automatically effect disposal at the conclusion of each test project (para 6-2i).
- c. Items of equipment used for experiments and tests by an activity/unit will or will not be documented in TAADS as follows:
  - (1) Will be documented:
- (a) HQDA-controlled equipment (para 2-19b, AR 310-34) required for support of base operations at test/experimentation activity installations. Includes, but not limited to, facility engineer, message center, security, motor pool, installation maintenance, and housekeeping equipment.
- (b) HQDA-controlled equipment (para 2-19b, AR 310-34) required for support of testing/experimentation for a period exceeding 2 years.
  - (2) Will not be documented:
- (a) Adequate numbers of prototype and necessary instrumentation required by an activity/unit for support of experiments and tests and procured with RDTE funds, including items purchased with other than RDTE funds when they are reimbursed with RDTE funds (OPA).
- (b) Standard items of equipment developed by the Army and nondevelopmental standard or nonstandard instrumentation required by an activity/unit for support of experiments and tests and financed by the tester from available OMA funds (less than \$3,000) or by the materiel developer from available PA funds (\$3,000 and over) in accordance with AR 70-10 and AR 71-3.
- (c) HQDA-controlled equipment (para 2-19b, AR 310-34) required for support of testing/experimentation for a period of less than 2 years. Equipment required for any period less than 2 years will be obtained on loan from the appropriate MRC. The RDTE appropriation will reimburse the MRC for items consumed in RDTE and will bear the cost necessary to return the item to MRC in serviceable condition prior to or upon completion of the loan period. Items on loan under provisions of this paragraph will not be modified or reconfigured.
- d. Test activities may submit request for equipment to be added to TDA whenever equipment is required for a period exceeding 2 years. Authority is granted test activities and appropriate TDA proponents to reinsert in the respective TDA those items of HQDA-controlled RDTE/testing/experimentation support equipment that were removed as a result of implementation of Change 5, AR 310-34 and Interim Change 101, 6 July 1982 to AR 310-34, if the items are required for a period of 2 or more years. To facilitate the TDA authorization of these items, permission is granted to use DA Form 2028 submitted with the TAADS input change package to describe the additions, instead of DA Form 4610-R submitted under provisions of

appendix H, AR 310-34. Use of DA Form 2028 is restricted to those quantities of formerly TDA equipment which are on-hand and which were transferred to temporary loan IAW Change 5 and Interim Change 101 to AR 310-34. All new requirements for this category equipment required in excess of 2 years will require DA Form 4610-R processed in accordance with appendix H, AR 310-34 and submitted to HQ TRADOC, ATTN: ATRM-F. Each test activity will take appropriate action with MRC to cancel temporary loans in effect which exceed 2 years. POC at TRADOC for loan assistance is ATTE-P.

- e. Government-owned contractor operated (GOCO) equipment for all contracts being performed for a TDA unit will be documented in separate paragraphs per separate contractor in the TDA of the unit for which the work is being accomplished. GOCO equipment used by a contractor performing at more than one installation to fulfill a contract will be documented as required on the separate TDA of the installations. See AR 310-49 for standard remark number for use in indicating GOCO motor vehicles furnished under provisions of AR 58-1.
- f. Test activities may submit TDA equipment deletions, additions and other changes necessary to mission requirements, particularly for HQDA-controlled items, as required. TDA changes will be submitted to TRADOC, ATTN: ATRM-FI, in accordance with TRADOC Suppl 1 to AR 310-34. (Policy stated in para 3-15a-d is contained in message, HQDA, DAMO-FDP, 191240Z Aug 82, RDTE Equipment and Equipment Used for Experiments and Tests.)

# \*3-16. Property accountability and requisition for equipment and instrumentation.

- a. Equipment and instrumentation procured with RDTE and OPA funds (reimbursed with RDTE funds) in support of user testing is authorized under AR 70-6. Test activities will use AR 70-6 as authorization to requisition equipment when purchasing through Army supply channels. This authority is to be used when funds are provided for the equipment and an authorization document must be cited (reference letter, DRCSM-PSM, DARCOM, 5 Aug 82, Authorization Documents for TRADOC Test Activities).
- b. Property book accountability will be maintained in accordance with AR 710-2 and AR 70-6 is the authorization for equipment.
- c. Accountability of repair parts required to support the RDTE mission will be accounted for using the "shop stock" policy in para 2-11i(1)(c), AR 710-2 and procedures in section II, chapter 8, DA Pam 710-2-1 as follows:
- (1) The Commanders, TCATA and CDEC and the Presidents of the Test Boards are authorized to approve other nondemand supported items in the shop stock (para 2-11i(1)(d), AR 710-2).
- (2) Test activities are not required to establish and maintain an operational load of class 9 supplies (repair parts), under provisions of paragraph 2-11i, AR 710-2, when only a few end items are documented in the TDA. These repair parts may be included in the "shop stock." The Commanders, TCATA and CDEC, and the Presidents of the Test Boards will be the approving authority for this option.
- d. Test activities' property accountability procedures for instrumentation, equipment, spare parts and other special test facilities are:

31.2 C2, TRADOC Reg 71-9

(1) Annually, during 4th quarter of each calendar year, each activity will review its TDA equipment list and property book and determine if the equipment and property should be retained or turned in.

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- (2) The review will determine if the instrumentation, spare parts, and special equipment can be utilized based on scheduled, planned tests or anticipated mission requirements. After completion of this review, the Commander/Board President or appointed representative will prepare a statement concerning this review. The statement will indicate whether changes were made or not. If equipment is declared excess, it will be disposed of as stated in subsequent paragraphs and transactions posted to the property book. HQ TRADOC, ATTN:
  ATTE-P, will approve direct transfers between MACOM in accordance with para 2-4, AR 710-2, when required.
- (3) This annual review will not replace or negate existing regulatory property accountability but will supplement management control over RDTE and other special procurements.
- \*3-17. Disposition instructions for equipment and instrumentation. An external agency or headquarters providing equipment and instrumentation for support of TRADOC testing is responsible for providing written disposition instructions. TRADOC test agencies are also responsible for insuring that the disposition instructions are received from the responsible agency at least 30 days prior to test completion. Equipment and instrumentation should be disposed of NLT 60 days after completion of test. When requested, this headquarters, ADCSTE (Resources & Policy) will assist the TRADOC test organizations regarding receipt of disposition instructions (para 23, AR 310-34 and TRADOC Suppl 1).
- a. TRADOC letters of execution (LOE) or test tasking directives will include equipment disposition instructions. Where the test organization is also the point of final disposition, the equipment will, upon receipt, be incorporated into the property accountability procedures of the test organization.
- b. Prior to initiation of any test, the test organization and permanent custodian (external source) of any equipment and instrumentation provided for support of TRADOC tests, should determine what will be a mutually acceptable physical condition of the equipment or instrumentation at the time of final disposition. If fair, wear and tear or serious damage to the equipment or instrumentation is anticipated during conduct of the test, repair or replacement costs will be included in the total test cost estimate within the OTP or RS, as applicable. (The Airborne Board is exempted from this requirement for airdrop only; however, planning should incorporate applicable damage costs whenever appropriate.) Test activities are responsible for assuming property accountability or obtaining appropriate documentation upon receipt of test items and support equipment provided to conduct user testing.
- c. Disposition policy and procedures for excess instrumentation and equipment are:
- (1) TRADOC's policy is to dispose of instrumentation and spare parts inventories no longer required, particularly, whenever there has been no usage during the preceding year. This will allow critically needed spare parts or equipment to be placed back into inventory and allow reallocation of instrumentation assets to other TRADOC test activities for test use. Identifying excess spare parts and instrumentation will reduce annual operation and maintenance costs and avoid procurement of unnecessary or duplicate equipment.

- (2) Whenever excess instrumentation or equipment exists, the test organization will notify ADCSTE, TRADOC and each TRADOC test activity with an information copy to HQ TECOM (DRSTE-AD-I) as to availability and transfer. Notification will include equipment nomenclature, age, cost, condition and usage. TRADOC activities will be given first priority for reallocation of excess equipment. DCSTE will resolve conflicts. If no TRADOC activities are interested in obtaining the excess equipment, ADCSTE will notify TECOM and make it available to the Army DT community in accordance with TRADOC and TECOM agreement on sharing instrumentation. Concurrently, ADCSTE, TRADOC will inform other HQ TRADOC elements or other services as appropriate to fully ascertain potential usages. When these procedures have been completed and remaining equipment still exists, it will be disposed of through regular supply channels. The ADCSTE, TRADOC is the responsible office for providing disposition instructions on excess test instrumentation or equipment. DCSPAL will issue disposal instructions; afterwards, the organization will dispose of the equipment within 60 days.
- d. One of the following procedures for disposition of CEP equipment will apply:
- (1) The item will remain on the proponent's or test organization's property book for testing through normal material acquisition testing procedures.
- (2) The item will be transferred to another proponent for evaluation as a CEP candidate.
- (3) The item will be disposed of by surplus or means of salvaging through normal supply disposition procedures after notification of excess equipment to all TRADOC and TECOM activities.
- (4) The item, if destroyed during testing, will be identified and disposition made as destroyed equipment. All destroyed equipment will be reported to ADCSTE (Resources & Policy), TRADOC.
- (5) The item may be retained as test activity mission property if approved HQ TRADOC, ATTN: ATTE-R.

• TR#	DOC R	eg 71 <b>-</b> 9
<b>∅</b>	APPROVES	108
. 2, 3, 8, 4 NONMAJOR SYSTEMS (TRADOC DESIGNATED TESTS)	REVIEW COMMENT	TRADOC SCHOOLS CENTERS TEST ORG
AI 2, 3, 8, 4, 1 (TRADOC DESI	INPUT	PROPO-
<b>a</b>	RESPONSI- BILITY	MODROM
AM (DAP)	APPROVES	ASARC DSARC TBB
PROGRAM STEVS	F	H RG

2								
DOCU- MENT	RESPONSI- BILITY	INPUT	REVIEW COMMENT	APPROVES	RESPONSI- BILITY	INPUT	REVIEW COMMENT	APPROVES
СТР	DARCOM	OTEA		ASARC DSARC IPR	DARCOM	PROPO- NENT SCH	TRADOC SCHOOLS CENTERS TEST ORG	IPR
IEP	OTEA	PROPO- NENT SCH OR TSM	TSM/SCH CEN TEST ORG TRADOC	OTEA	PROPONENT SCH	SCHOOLS CENTERS	TRADOC SCHOOLS CENTERS TEST ORG	CAC
0TP	ОТЕА	PROPO- NENT SCH OR TSM	TSARC	DA (DCSOPS)	TEST ORG (TRADOC)	PROPO- NENT SCH	TSARC	DA (DCSOPS)
TRADOC TSP	PROPO- NENT SCH OR TSM	SCH00LS CENTERS	TSM/SCH CEN TEST ORG TRADOC	TRADOC	PROPONENT SCH	SCHOOLS CENTERS	TRADOC CENTERS TEST ORG	TRADOC
TDP	OTEA	TEST ORG	TSM/SCH CEN TEST ORG TRADOC	OTEA	TEST ORG (TRADOC)		SCHOOLS CENTERS TRADOC	0TEA (CAT 2) TRADOC (CAT 3 & 4)
TRADOC OTRS	PROPONENT SCH			PROPONENT SCH	PROPONENT SCH			PROPONENT SCH
SAFETY RELEASE	DARCOM			OTEA	DARCOM			TRADOC SAFETY OFFICE
TR	ОТЕА	TEST ORG		OTEA	TEST ORG (TRADOC)			TEST ORG (TRADOC)
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Figure 3-1. TRADOC test documentation responsibilities.

CAC

TRADOC SCHOOLS CENTERS

SCHOOLS CENTERS

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**OTEA** 

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ACENCY DESD

Requirements Document Approved.  Security Classifications Guide Provided.  OPSEC Guide Provided.  IEP Submitted.  IEP Approved (Provide name of preparing activity and date it was approved by CAC, or the date it is expected to be approved.).  DI Inclusive Date.  DARCOM  Doctrinal and Organizational TSP.  Proponent Treat TSP.  Proponent Training TSP (Concept).  Combat and Training Developer OTRS.  NET TSP Provided to Proponent (or Test Organization when appropriate).  SSP Listing.  DARCOM  DDSTEL/  Materiel Developer OTRS.  Detailed Test Plan Approved.  Detailed Test Plan Approved.  Detailed Test Directorate.  Test Orgn  Training TSP.  Proponent  Test Orgn  Training TSP.  Proponent  Test Orgn  Training TSP.  Proponent  Test Orgn  Activate Test Directorate.  Test Orgn  SSP Components.  DARCOM  Safety Release.  DARCOM  Safety Release.  DARCOM  Safety Release.  DARCOM  Safety Release.  DARCOM  Test Orgn  Test Orgn  Test Completed.  Test Orgn  Test Orgn  Test Completed.  Test Orgn  Test Completed.  Test Orgn  Test Completed.  Test Orgn  Test Completed.  Test Orgn  Test Report.  Test Orgn  TRADOC  CAC  TRADOC Recommended Position Submitted.  Proponent  TRADOC Decision Review Date (IPR, ASARC, DSARC).  DARCOM  TRADOC  DARCOM  DARCOM	MILESTONE ITEM	FOR MILESTONE
TRADOC Recommended Position Submitted Proponent TRADOC Position Approved TRADOC	Requirements Document Approved. Security Classifications Guide Provided. OPSEC Guide Provided. IEP Submitted. IEP Approved (Provide name of preparing activity and date it was approved by CAC, or the date it is expected to be approved.). DT Inclusive Date. Doctrinal and Organizational TSP. Threat TSP. Training TSP (Concept). Combat and Training Developer OTRS. NET TSP Provided to Proponent (or Test Organization when appropriate). SSP Listing. TDP Submitted. TDP Approved. Materiel Developer OTRS. Detailed Test Plan Approved Activate Test Directorate Training TSP. Instrumentation/Special Equipment Required. SSP Components. Test Items Due Safety Release. Safety Release. Conduct of Training Troops. Training OTRS. Test Initiated Test Completed Test Report. IER Submitted.	DA DARCOM DARCOM Proponent  CAC DARCOM Proponent Test Orgn DARCOM Test Orgn Proponent Test Orgn Proponent Test Orgn DARCOM DARCOM DARCOM DARCOM TRADOC Proponent Proponent Test Orgn
	IER Approved TRADOC Recommended Position Submitted TRADOC Position Approved	CAC Proponent TRADOC

 $\underline{1}/\text{TDP}$  for category 2 systems are approved by OTEA.

Other milestones believed necessary for effective management may be included as desired. When all elements of a TSP will not be required, the OTP for the test must clearly indicate in the milestone list those elements which will not be required; e.g., a threat TSP may not be required for the testing of a training device. This OTP, once approved, constitutes waiver of those unnecessary TSP elements designated in the milestones as "NOT REQUIRED." Milestones already achieved at the time of OTP preparation will show actual date of accomplishment vice "T" dates. (NOTE: A complete TRADOC Form 413-R (TRADOC TRMS Direct Labor, Manhours and Cost Estimate) will be provided with all new or revised OTP submitted to HQ TRADOC. See TRADOC Reg 71-7 for preparation of TRADOC Form 413-R, RCS ATCD-13(R2).)

Figure 3-2. Minimum essential milestones for OTP for operational tests (OT).

AGENCY RESP

MILESTONE ITEM	FOR MILESTONE
EP Submitted	Proponent
EP Approved (Provide name of preparing activity and date it was approved by CAC, or the date it is expected to be	CVC
approved.)  Doctrinal and Organizational TSP	Proponent
Threat TSP Training TSP	Proponent
Instrumentation/Special Equipment Required TDP Submitted	lest orgn
TDP Approved	Test Orgn
Activate Test Directorate	DARCOM
Safety Release	Proponent
Test Initiated	Test Orgn
Test Report ER Submitted	lest orgi
ER Approved	CAC

Other milestones believed necessary for effective management may be included as desired. When all elements of a TSP will not be required, the OTP for the test must clearly indicate in the milestone list those elements which will not be required; e.g., a threat TSP may not be required for the testing of a training device. This OTP, once approved, constitutes waiver of those unnecessary TSP elements designated in the milestones as "NOT REQUIRED." Milestones already achieved at the time of OTP preparation will show actual date of accomplishment vice "T" dates. (NOTE: A complete TRADOC Form 413-R (TRADOC TRMS Direct Labor, Manhours and Cost Estimate) will be provided with all new or revised OTP submitted to HQ TRADOC. See TRADOC Reg 71-7 for preparation of TRADOC Form 413-R, RCS ATCD-13(R2).)

Figure 3-3. Minimum essential milestones for OTP for force development test and experimentation (FDTE).

#### CHAPTER 4

# INTEGRATING CENTERS, SCHOOLS, TRAINING SUPPORT CENTER, AND HEADQUARTERS TRADOC OPERATIONAL FUNCTIONS

\*4-1. General. The purpose of this chapter is to expand the responsibilities shown in chapter 1 and specify major tasks and functions of staff elements and organizations. The Commander, TCATA is designated the Deputy Chief of Staff for Test and Evaluation (DCSTE). The DCSTE has two principal assistants; the ADCSTE for Operations (Commander of the Combat Developments Experimentation Command, Ft Ord, CA) and the ADCSTE for Resources and Policy, Ft Monroe, VA. Functions impacting on policy and resources or requiring coordination within HQ TRADOC or outside agencies are accomplished through the HQ DCSTE staff. Paragraphs 4-2f through 4-2u represent the functions of the ADCSTE (Resources & Policy) and paragraphs 4-2v through 4-2y those of the ADCSTE (Operations). HQ TRADOC DCSTE functions delegated for accomplishment by the TRADOC Combined Arms Test Activity are specified in chapter 5.

# \*4-2. Deputy Chief of Staff for Test and Evaluation (DCSTE), HQ TRADOC.

- a. Approves test design plans (TDP) for TRADOC operational test (OT), force development test and experimentation (FDTE) and follow-on evaluation (FOE). (Operational Test and Evaluation Agency (OTEA) is the final approval authority for TDP of category 2 nonmajor systems.)
  - Develops TRADOC Instrumentation Program.
  - c. Maintains TRADOC instrumentation inventory.
  - d. Manages the TRADOC Test and Evaluation Methodology Program.
  - e. Manages DCSTE ADP assets.
  - f. Assigns tests to the TRADOC test organizations.
- g. Represents TRADOC at the OTEA Working Group TSARC, assists the DCSTE at the General Officer TSARC, and chairs the TRADOC TSARC.
  - h. Manages and administers T&E funding programs.
  - i. Serves as proponent for TDA changes for test organizations.
- j. Provides T&E staff reviews and coordination on documentation supporting the acquisition process.
  - k. Prioritizes the TRADOC test program.
- 1. Develops, updates and distributes TRADOC T&E policy and procedures to include regulations, handbooks and letters of instruction.
- m. Coordinates T&E procurement requirements with TRADOC Contracting Activity, Ft Eustis, VA.

- n. Interfaces with TRADOC staff, other MACOM, DA and other services regarding T&E matters.
- o. Serves as the US expert point of contact for bilateral agreements and testing programs.
- p. Schedules, programs and manages user tests of operational concepts developed or approved by HQ TRADOC.
- q. Manages the concept evaluation program (CEP), chairs the CEPSARC, and approves and funds CEP tests.
- r. Approves requests for test waivers and forwards appropriate waiver requests to OTEA for DA approval.
  - s. Manages T&E of foreign materiel.
- t. Supervises the Army Development and Acquisition of Threat Simulators (ADATS) Program for TRADOC.
  - u. Approves test reschedules and terminations.
  - v. Supports the High Technology Test Bed (HTTB) Test Group.
- w. Approves (for CDEC and HTTB) test design plans (TDP) for TRADOC operational tests (OT)(cat. 3 and 4), force development test and experimentation (FDTE), follow-on evaluation (FOE), and joint test (JT).
  - x. Participates at the General Officer TSARC.
  - y. Provides representative to the OTEA Working Group TSARC.

# 4-3. US Army Combined Arms Center (CAC), Ft Leavenworth, KS.

- a. Acts as the TRADOC independent evaluator with approval authority for TRADOC independent evaluation plans and reports for user testing (FDTE as directed).
- b. Develops TRADOC test issues and criteria for all major, DAP, and category I nonmajor systems and submits to HQ TRADOC for forwarding to OTEA.
- c. Designates lead proponents and cooperative proponents for user testing when required.
- d. Reviews requests for waivers of all or any portion of test submitted by TRADOC proponent and recommends approval to HQ TRADOC. Submits requests for waivers of tests for which CAC is performing the independent evaluation to TRADOC.
- e. Monitors planning and development of TRADOC TSP to insure timely availability of the TSP to test organizations. Initiates corrective action in the event of inadequate or late submissions of TSP.

- f. Develops TRADOC's joint test (JT) program and submits to HQ TRADOC for forwarding to DA/DOD.
- g. Provides the Army's evaluation of joint tests in coordination with OTEA.
  - h. Insures the approved IEP is provided the test organization.
  - i. Reviews TDP to insure compatibility with IEP.
- j. Attends TIWG as an associate member for OTEA conducted tests and as principal member (operational test evaluator) for TRADOC conducted tests.
- k. Insures that the IER is submitted to the DSARC/ASARC/IPR in accordance with paragraph 3-20 of AR 71-3.

# 4-4. Proponents.

- a. Proponent responsibilities for tests conducted by OTEA.
- (1) Identifies and defines issues and associated criteria, provides to CAC as early as possible and continuously apprises CAC of needed changes to the issues and criteria. Provides associate member to TIWG.
- (2) Reviews the outline test plan (OTP) and provides concurrence and/or comments to OTEA with copy furnished to CAC and ADCSTE (Resources & Policy), TRADOC.
- (3) Develops, coordinates, and provides TRADOC approved TSP to OTEA per OTP milestones. Distributes approved TSP in accordance with appendix E.
- (4) Conducts or arranges for the training of test player personnel in accordance with the training TSP.
- (5) Provides the operational test readiness statement (OTRS) required from the combat developer and trainer as scheduled in the OTP milestones.
- (6) Reviews the test design plan (TDP) and provides concurrence and comments to OTEA with copy furnished to CAC, TRADOC DCSTE and ADCSTE (Resources & Policy).
  - (7) Monitors test execution as necessary.
- (8) Reviews the test report (TR) and independent evaluation report (IER) and provides comments to CAC, TRADOC DCSTE and ADCSTE (Resources & Policy).
- (9) Develops proposed TRADOC position for decision review (IPR/ASARC/DSARC) in coordination with interested TRADOC agencies using TR, IER and other available data and submits to TRADOC DCSCD for approval.
- (10) Submits requests for waiver of scheduled OT, TSP elements required to support scheduled OT and use of school trained troops during OT II/OT III/FOE as required by paragraphs 2-6 and 2-7 of this regulation.

- b. Proponent responsibilities for OT and FOE conducted by TRADOC.
- (1) Provides early identification and definition of issues and criteria to CAC and identifies need for cooperative proponents.
- (2) Prepares, coordinates and submits new or revised IEP to CAC for approval. Maintains updated IEP throughout the test program or materiel acquisition program as appropriate.
- (3) Develops, coordinates, and distributes the TRADOC approved TSP to the test organization per OTP milestones. Distributes approved TSP in accordance with appendix E.
- (4) Monitors planning and development of the DARCOM TSP to insure their suitability and timely availability. Initiates corrective action in the event of inadequate or late submissions of TSP.
- (5) Develops the TRADOC input to the coordinated test program (CTP) in coordination with the materiel developer, operational test organization, and other appropriate TRADOC organizations.
- (6) Conducts or arranges for the training of test player personnel in accordance with the training TSP.
- (7) Insures that all required operational test readiness statements (OTRS) are provided as required by AR 71-3 and as scheduled in the OTP milestones.
  - (8) Monitors test execution.
- (9) Participates in RAM scoring conferences per TRADOC Suppl 1 to AR 702-3.
- (10) Prepares, coordinates and submits independent evaluation reports (IER) to CAC for approval as scheduled. Distributes approved IER in accordance with appendix E.
- (11) Develops proposed TRADOC IPR position using test reports, IER and other data.
- (12) Submits requests for waiver of scheduled OT, TSP elements required to support scheduled OT, use of school trained troops during OT II/OT III/FOE, and RAM subtests for TRADOC conducted OT II to TRADOC ADCSTE (Resources & Policy) as required by paragraphs 2-7 and 2-12 of this regulation.
- c. <u>Proponent responsibilities for FDTE</u>. Proponent responsibilities are the same as those stated in b above except as follows:
- (1) Subparagraphs (4), (5), and (10) normally apply only to those FDTE planned and conducted in support of particular system acquisition programs (para 3-3c).

- (2) Subparagraph (12) does not apply.
- (3) The following added functions apply:
- (a) Determines and recommends needed FDTE per IEP submitted to CAC for approval (para 3-3c).
- (b) Prepares, coordinates and submits separate IER for CAC approval, when directed.
- (4) Develops, coordinates and provides issues and criteria to CAC for forwarding through TRADOC to OTEA for major FDTE.
  - d. Proponent responsibilities for DOD-directed joint tests (JT).
  - (1) Provides recommendations to CAC regarding candidate for JT programs.
- (2) As directed, provides a concept definition study to support decisions and planning for a recommended joint test.
- (3) Develops, coordinates and distributes required TRADOC approved TSP in support of JT to the Joint Test Directorate (JTD), OSD.
- (4) Monitors status of JT to insure timely submissions of TRADOC planning data to CAC in support of Army evaluations.
- (5) Reviews test reports for assigned JT and provides comments and recommendations to CAC.
  - e. Proponent responsibilities for concept evaluation program (CEP).
- (1) Identifies CEP candidate, prepares CEP resume sheets (RS) in accordance with appendix C and in coordination with a test organization (if collocated with the proponent) and submits RS to TRADOC ADCSTE (Resources & Policy).
- (2) Develops and provides any needed TRADOC TSP to the test organization as required by the RS milestones.
- (3) Arranges for and monitors provisions of any TSP needed from DARCOM or any other non-TRADOC agency as may be required by RS milestones.
  - (4) Conducts or arranges for the training of test player personnel.
- (5) Approves the TDP. (When directed, the TDP will be submitted to TRADOC ADCSTE (Resources & Policy) for approval.)
  - (6) Monitors test execution.
- (7) Insures that all necessary OTRS are provided to the test organization as scheduled in the RS milestones.
- (8) Prepares and distributes a proponent evaluation of the test within 30 days after receipt of test report.

- f. Proponent responsibilities for non-developmental items (NDI) acquisition and international materiel evaluation (IME) test programs.
- (1) Prepares, coordinates and submits IEP and IER to CAC for approval. Distributes in accordance with appendix E.
- (2) Reviews User/Market Survey Questionnaire prior to initiation and provides comments or concurrence to the material developer.
- (3) Participates with materiel developer in conducting user/market surveys.
- (4) Develops the TRADOC portion to the CTP in coordination with the materiel developer, operational test organization, and other appropriate TRADOC organizations.
- (5) Provides associate representative to Evaluation Coordination Working Group (ECWG) for IME programs.
- (6) Determines the need for and recommends to TRADOC ADCSTE (Resources & Policy) conduct of user testing to support IME phase II effort.
- (7) Develops proposed TRADOC IPR position using user/market survey, IER and other data. Coordinates and submits proposed position to TRADOC DCSCD for approval.

# 4-5. US Army Logistics Center (USALOGC).

- a. Serves as the executive agent for TRADOC regarding RAM and ILS as specified in TRADOC Suppl 1 to AR 702-3 and TRADOC Reg 700-1, respectively.
- b. Advises and assists HQ TRADOC in the establishment and dissemination of RAM and ILS policy, procedures, and methodologies applicable to the TRADOC user testing and independent evaluation missions.
- c. Supports CAC in the development, review and approval of RAM and logistics issues and criteria.
  - d. Provides a representative to TIWG as an associate member.
- e. Reviews and approves RAM and logistics related portions of test support packages.
- f. Reviews CTP, TEMP, OTP (FYTP), IEP, TDP and IER for all tests. For TRADOC user tests, recommends approval of the RAM and logistics content of the IEP, TDP and IER. Advises CAC and TRADOC DCSTE of LOGC approval or of inadequacies of these documents.
- g. Upon request of the combat developer, provides logistics representative to DT and OT scoring conferences for major, DAP and category 1 nonmajor.
- h. Reviews and concurs in requests for waiver of RAM or logistics portions of user testing.



- i. Serves as the operational evaluator for RAM and logistics supportability (LOG S) aspects for category 2, 3 and 4 TRADOC tests. LOGC may task the appropriate logistics oriented school for accomplishment of any portion of this evaluation. LOGC will provide this IEP and IER input to the proponent.
- j. Attends DT, OT and FDTE scoring conferences as the "operational evaluator" for TRADOC tests (TRADOC Suppl 1 to AR 702-3) in conjunction with i above.
- k. Coordinates with the Training Support Center (TSC) and logistics oriented school, in evaluating the quality of contractor training of logistics support personnel when these personnel are trained by other than Army personnel; and verifies and approves the logistics support of new, emerging material systems.

# 4-6. Logistics oriented schools.

- a. Identify RAM and logistics issues to be addressed in each test/evaluation and assist in development of the associated criteria.
- b. Develop system logistics concepts and other logistics associated information for the doctrinal and organizational test support package (TSP).
- c. Identify and initiate maintenance courses sufficiently early to provide properly trained support maintenance personnel for participation in all OT II, including logistics support training and concept where RAM and logistics supportability is an issue.
- d. Participate in planning conferences for each operational test to include attending TIWG as an associate member when tasked by LOGC.
- e. Comment regarding the TDP's planned allocation of time and resources for support of tested items in the operational mode summary/mission profile (OMS/MP) which will guide the logistics unit participating in the test.
- f. Perform operational independent evaluator functions for RAM and logistics supportability aspects for TRADOC tests as tasked by LOGC.

# 4-7. US Army Training Support Center (USATSC).

- a. As executive agent for training and training publications, will--
- (1) Advise and assist HQ TRADOC in the establishment and dissemination of training policy, procedures, and methodologies applicable to the TRADOC training test mission.
- (2) Attend meetings as required to insure that training requirements for developing systems and concepts are properly addressed.
- (3) Review training issues and associated criteria regarding systems and concepts undergoing test and evaluation for clarity, appropriateness and adequacy.
- (4) Review IEP, IER, TDP and test reports for adequacy of training content and provide comment and concurrence to the originating agency. Advise TRADOC DCSTE and CAC, as appropriate, regarding training-related inadequacies.

- (5) Approve the training TSP for adequacy and initiate action to correct deficiencies if they exist.
  - (6) Provide a training representative to TIWG, as appropriate.
- (7) Monitor job/task analysis in accordance with TRADOC Pam 350-30 and TRADOC Cir 351-4 during the concept exploration phase to identify high risk tasks and related training test issues.
  - b. As TRADOC's training developer for training, will--
- (1) Insure that test and evaluation results are incorporated in training effectiveness analysis (TEA) and are considered in the TRADOC position for materiel acquisition decision reviews (IPR/ASARC/DSARC) for training devices.
- (2) Assure appropriate TRADOC training developer representation at TIWG for all training devices.
- (3) Staff and approve combat developer and trainer test support packages prepared by TRADOC centers and schools to support both OTEA and TRADOC user tests for training devices.
- (4) Staff training device acquisition documents with TRADOC ADCSTE (Resources & Policy) including requirements documents, acquisition plans, TEA, IPR/ASARC/DSARC packages and TRADOC position.
- (5) Insure that training device requirements documents are coordinated with and distributed to user test agencies.
- (6) Exercise staff responsibility for review of training device issues and associated criteria, IEP and IER.
- (7) Review TDP pertinent to all training device user tests for adequacy of training content and provide comments to originating test organization. Advise DCSTE of any training inadequacies when training device TDP is staffed for approval.

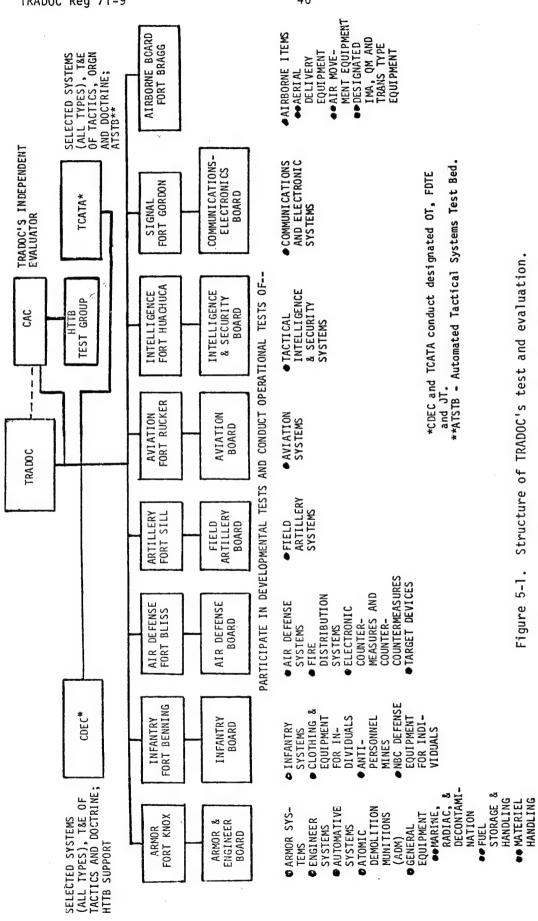
#### CHAPTER 5

## TRADOC TEST AND EVALUATION ORGANIZATIONS

- 5-1. <u>General</u>. Each test organization contributes a unique capability to the overall TRADOC user test capability. TCATA is structured to conduct large scale field tests and OT using player units up to Corps size. CDEC conducts scientific, highly instrumented field experimentation to provide high resolution, accurate data collected in an operational environment. Each test board is designed to conduct OT, FDTE, CEP or other user tests involved in its military discipline. Detailed data as to command relationships and missions and functions of the test organization is provided in TRADOC Reg 10-41. Figure 5-1 depicts typical command structure.
- 5-2. TRADOC test organizations. Test organizations will be formally directed to conduct tests. Formal tasking and test priority scheduling for all test organizations will be accomplished by ADCSTE (Resources & Policy), TRADOC either through the OTP outlined in the Army Five Year Test Program (FYTP) or by letter of execution (LOE). TRADOC test organizations named by an approved OTP in the FYTP as the "test organization" are considered to have been tasked by HQDA to conduct that test. Tasking may also be accomplished by HQ TRADOC letters of execution for customer tests, innovative tests (AR 71-3), or other tests and support not listed in the FYTP. The TRADOC test organizations are:
  - a. TRADOC Combined Arms Test Activity (TCATA), Ft Hood, TX.
- b. US Army Combat Developments Experimentation Command (CDEC), Ft Ord and Ft Hunter Liggett, CA.
  - c. US Army Air Defense Board (USAADBD), Ft Bliss, TX.
  - d. US Army Armor & Engineer Board (USAARENBD), Ft Knox, KY.
  - e. US Army Airborne Board (USAABNBD), Ft Bragg, NC.
  - f. US Army Aviation Board (USAAVNBD), Ft Rucker, AL.
  - g. US Army Communications-Electronics Board (USACEBD), Ft Gordon, GA.
  - h. US Army Field Artillery Board (USAFABD), Ft Sill, OK.
  - i. US Army Infantry Board (USAIB), Ft Benning, GA.
  - j. US Army Intelligence and Security Board (USAISBD), Ft Huachuca, AZ.
- k. High Technology Test Bed Test Group (HTTB Test Gp), Ft Lewis, WA (see reference F-3k for MOU).
- 5-3. Responsibilities of test organizations. Test activities will--
- a. Review test issues and criteria, determine which are testable, and recommend changes, additions and deletions to the proponent.

- b. Prepare and coordinate outline test plans (OTP).
- c. Provide principal operational tester representative to TIWG for TRADOC performed OT and FOE.
- d. Review all TSP for adequacy. Notify ADCSTE (Resources & Policy), TRADOC of any inadequacies or missed TSP milestones.
- e. Plan, conduct or participate in user testing as tasked by FYTP or the DCSTE.
- f. Prepare, coordinate and distribute test design plans (TDP) for assigned tests. Submit TDP for OT, FOE and FDTE to DCSTE, TRADOC for approval. Submit TDP for CEP to proponent or when directed to ADCSTE (Resources & Policy), TRADOC for approval.
- g. Prepare, approve and distribute test reports for assigned tests. When directed, submit test report to DCSTE, TRADOC for review prior to distribution.
- h. Assist center commanders in matters associated with testing of training, logistics support, human factors and materiel systems.
- i. Provide advice on user testing to TRADOC community and other Army agencies.
- j. Prepare and submit the test organization test instrumentation plan annually to the DCSTE, TRADOC with an information copy to ADCSTE (Resources & Policy) (RCS ATTE-4).
- k. Submit methodology investigation proposals (MIP) and reports as required to DCSTE, TRADOC.
  - 1. Maintain TRMS requirements (TRADOC Reg 71-7).
- m. Prepare and distribute the Monthly Significant Actions Report to the DCSTE and ADCSTE, TRADOC as shown in figure 5-2 (RCS ATTE-1).
- n. Provide requirements for new threat simulators to ADCSTE (Resources & Policy), TRADOC.
- o. Commence testing only after receipt of all required documents, approvals, and resources as outlined in this regulation and the appropriate OTP and CEP RS milestones listing. When appropriate, recommend test initiation to DCSTE whenever lack of test documentation has delayed test start. (See figure 3-2 for the minimum essential milestone requirements for OTP.)
- p. Make recommendations to ADCSTE (Resources & Policy), TRADOC for test terminations; unilaterally cease testing and notify ADCSTE when deemed prudent.
- q. Prepare and distribute system performance report (SPR) in accordance with appendixes B and E, respectively.

- r. Provide representative to TRADOC working TSARC.
- s. Provide test CTP input to proponent.
- t. Prepare and maintain the detailed test plan.
- u. Determine whether test objectives, critical issues and criteria can be fulfilled based on OTRS and safety release received. Notify ADCSTE (Resources & Policy) if determined these cannot be achieved along with recommended course of action.
- v. Notify ADCSTE (Resources & Policy) when it is determined that test schedule conflicts or other circumstances exist which would necessitate delay of scheduled test dates.
- w. Insure that soldiers comprising the test populations are representative of the soldiers who will operate, maintain and repair the system when fielded.
- 5-4. Additional test organization assignments.
  - a. TCATA is tasked to provide technical support as follows:
- (1) Review test design plans (TDP) for TRADOC operational test (OT), force development test and experimentation (FDTE), follow-on evaluation (FOE), and joint tests (JT) and submit final plans for DCSTE approval.
  - (2) Develop the TRADOC Test Instrumentation Program (TTIP).
  - (3) Maintain an inventory of TRADOC instrumentation.
  - (4) Develop selected TRADOC instrumentation systems.
- (5) Provide instrumentation technical support to TRADOC activities as requested.
- (6) Develop and manage the TRADOC Test Management Information System (TMIS).
  - (7) Develop and conduct the TRADOC Test Officer's Course.
  - (8) Manage the TRADOC Test and Evaluation Methodology Program.
  - (9) Monitor DCSTE ADP assets.
- b. CDEC is tasked to support the High Technology Test Bed (HTTB) Test Group.
  - c. USAISBD is tasked to execute foreign materiel test and evaluation.



Structure of TRADOC's test and evaluation. Figure 5-1.

SUBJECT: (Organization; e.g., TCATA) Monthly Significant Actions Report (Period Covered; e.g., June 1981).

- 1. COMPLETED TESTS: (within this reporting period).
  - A. Test Title.
  - (1) Test Number and TRADOC Project Number (if assigned).
  - (2) Start and end dates.
- (3) Short narrative of test/experiment purpose, emerging results or findings and date that final report was rendered.
  - B. Test Title.
  - (1)
  - (2)
  - (3)
- 2. CURRENT TESTS: Format same as paragraph 1 above, but only for those tests/experiments considered significant.
- 3. FUTURE TESTS: Format same as paragraph 1 above, but only for those test/experiments considered significant during next three months.
  - 4. HIGHLIGHTS: Visits, visitors and meetings of significant interest.
  - 5. INSTRUMENTATION/METHODOLOGY: Any information of general interest.
- 6. COMMANDER'S COMMENTS: Items that the commander believes should be brought to the attention of HQ TRADGC.

NOTE: Suspense date for this report will be the 10th of the month following the end of the reporting period.

Figure 5-2. Format for the test organization Monthly Significant Actions Report (RCS ATTE-1).

## CHAPTER 6

## INSTRUMENTATION, SIMULATORS, AND METHODOLOGY

- 6-1. <u>General</u>. TRADOC Test Instrumentation Program (TTIP), the Army Development and Acquisition of Threat Simulators (ADATS) Program, and methodology improvement program are designated to support Army user testing and OSD joint testing. Descriptions, policies and procedures for these programs are contained in this chapter. These will be supplemented at a future date through TRADOC Pam 71-15.
- 6-2. TRADOC Test Instrumentation Program (TTIP). The purpose of the TTIP is to develop an annual master plan that establishes future instrumentation requirements to support test organizations' 5-year workload projections and TRADOC's support to Army (OTEA) and OSD-directed JT. Each TRADOC test organization will establish and maintain organizational requirements for development and procurement of instrumentation to support mission testing. Organizational requirements will be submitted annually (RCS ATTE-4) to the DCSTE, TRADOC NLT 1 August, with an information copy to the ADCSTE (Resources & Policy), TRADOC. HQ TRADOC will prioritize the test activities' instrumentation requirements into a TTIP and fund, within resource availability, approved instrumentation projects. Test organizations will be notified at the beginning of each fiscal year which projects are funded. Test organizations will not reprogram previously allocated instrumentation monies that have been approved and funded for specific development and procurement without approval from HQ TRADOC. Test organizations may request reprograming of approved instrumentation projects by letter submission to DCSTE, TRADOC with an information copy to ADCSTE (Resources & Policy). The letter will request reprograming, stating the reason or justification and provide a detailed project description and justification sheet if a new start (requirement) is established. If approved, this headquarters will make the necessary funding documentation changes and simultaneously notify the test organization of the decision. Any new requirements established during the existing fiscal year will be processed in the same manner. General quidances are:
- $\star$ a. Policy for disposition of excess test instrumentation and equipment is shown in para 3-15, 3-16 and 3-17. ADCSTE (Resources & Policy), TRADOC is the responsible HQ TRADOC staff element for disposition instructions.
- \*b. TRADOC's instrumentation program is funded by RDTE and OPA funds. However, test activities may use operating funds, either OMA or RDTE, to procure equipment, replacement components or miscellaneous instruments for general operation support of user testing. OMA procurements cannot exceed \$3,000 per individual item.
- \*c. ADPE funded by the TRADOC instrumentation program comes under the auspices of scientific and engineering application of AR 18-1 and TRADOC Suppl 1.
- d. OPA funded instrumentation will be accounted for (property book) under the same provisions as RDTE developed and procured equipment (AR 70-6 and



- AR 70-10). Audio/video is considered instrumentation when procured to support user testing and is excluded from special procurement requirements of AR 108-2 for installation, public information, schools and TAG usages.
- \*e. TRADOC's RDTE and OPA funded instrumentation are exempted from the procurement requirements of AR 750-43, Maintenance of Supplies and Equipment for Test Measurement and Diagnostic Equipment (TMDE). Instrumentation calibration requirements will be in accordance with AR requirements.
- f. All instrumentation development, acquisition and procurement will meet all procurement regulations as deemed necessary by procurement agency. Approval and funding of instrumentation projects by this headquarters does not waive these regulatory requirements.
- g. Instrumentation procurement problems or difficulties should be made known to the ADCSTE (Resources & Policy), TRADOC for assistance or resolution.
- h. TRADOC instrumentation is scientific, ADPE or technical equipment used to measure, sense, record, transmit, process or display data during tests, evaluations or examination of materiel, training concepts, or tactical doctrine. Audio-visual (AR 108-2) is included as instrumentation when used to support user testing. User testing includes OT, FDTE and CEP.
- \*i. Equipment modifications to nonstandard (nontype classified) equipment are excluded from the product improvement program (AR 70-15), configuration management (AR 70-37) and modification of materiel (AR 750-10). Changes or modifications to nonstandard items are the responsibility of the activity using the item. Modifications to standard (type classified) equipment on activity TDA or borrowed will be performed in accordance with paragraph 4-2, AR 750-10. All requests for approval from sponsoring agencies will be forwarded through HQ TRADOC, ATTN: ATPL-MM with an information copy to ATTE-P.
- \*j. The ADCSTE will act as coordinator for all test and evaluation contractual requirements (ATTN: ATTE-P) and will provide or make arrangements for procurements.
- 6-3. Army Development and Acquisition of Threat Simulators (ADATS). The purpose of the TRADOC (Air Defense) ADATS Program is to support Army testing by providing a capability for creating a realistic threat for use in a simulated tactical user test environment. The complete program is documented in the US Army Threat Simulator Master Plan, HQDA, DAMA-PPM-T, June 1980. This Army program consists of an Army Management Plan (vol 1), TRADOC's Air Defense Simulator Program (vol 2), Non-Air Defense and Communications Simulators (vol 3), and Miscellaneous Simulators (vol 4).
- a. The responsibility for operation and maintenance of air defense equipment simulators is assigned to the US Army Air Defense School, Ft Bliss, TX (vol 2). Air defense simulators are Army assets available for use in all Army and joint service testing. First priority use of air defense simulators is in support of TSARC approved tests published in the FYTP. The Air Defense School will submit air defense development requirements (RCS ATTE-5) to ADCSTE (Resources & Policy), TRADOC NLT 30 days after conclusion of the semiannual DA/TRADOC simulator requirements meeting. All air defense simulator requirements

for supporting tests will be included in OTP (by the test organizations or proponent) and will be coordinated with the Air Defense School. The point of coordination for ADATS use, deployment, costing and development is:

Commandant
US Army Air Defense School
ATTN: ATSA-CDT
Fort Bliss, TX 79916

- b. The responsibility for nonair defense and communications simulators (NADACS) is assigned jointly to TRADOC (USAISBD) and DARCOM (USAEPG)(vol 3). The USAEPG (DARCOM/TECOM), Ft Huachuca is the Army lead proponent and is responsible for overall range facility operations and NADACS required primarily for DT. The USAISBD is assigned responsibility for those NADACS required primarily for OT. Responsibility for NADACS requirements common to DT and OT is shared. Any TRADOC command having specialized requirements which affect the NADACS acquisition or programed use, should coordinate those requirements with the USAEPG or USAISBD. INSBD will consolidate TRADOC's NADACS requirements and provide to USAEPG. The USAISBD and USAEPG will consolidate these requirements and update volume 3 of the US Army Threat Master Plan annually by 30 September. TRADOC's executive agent for TRADOC organizations' NADACS requirements is President, USAISBD (ATSI-BD-PM), Ft Huachuca, AZ 85613, AV 879-2785/4590.
- c. Miscellaneous simulators (vol 4). This program will include training type simulators and simulators not shown in volumes 2 and 3. Excluded are land mine and indirect fire threat simulators. Volume 4 is to be published.
- 6-4. Methodology Improvement Program. The purpose of this program is to provide a capability for test organizations to determine, develop or validate test methods, procedures, and instrumentation requirements for support of future test programs and missions. It can be used to explore, evaluate and identify new test techniques, measures of effectiveness (MOE) and procedures, or to improve upon existing methodology for conduct of user testing. This capability can also be used to identify needs for instrumentation to support future tests. Methodology investigation proposals (MIP) may be submitted for approval and implementation at any time. Procedures are: test organizations submit proposed MIP for approval to the DCSTE, TRADOC with an information copy to ADCSTE (Resources & Policy), TRADOC. TRADOC will approve and fund on an as required basis. Test organizations will implement after approval.

### APPENDIX A

## EXPLANATION OF TERMS

The following explanations apply and should be used in conjunction with appendix A or AR 71-3 which is the primary reference document for this regulation.

Army Systems Acquisition Review Council (ASARC). An Army panel composed of the VCSA (chairman), ASA (IF & FM), ASA (RDA), DUSA (Operations Research), DCSOPS, DCSRDA, DCSLOG, Dir PAE, CG DARCOM, and CG TRADOC. Additional special members (AR 1000-1) will attend when called by the chairman. The ASARC (AR 15-14) reviews major and designated acquisition programs when they reach the following milestones:

O-----Enter concept exploration.

I-----Enter demonstration and validation.

II----Enter full-scale development.

III----Enter production and deployment unless low-rate initial production is directed.

IIIa---Enter full production if low-rate initial production had been directed.

Categorization of systems for OT management. A classification of systems as major, DAP or nonmajor. Major systems are those which qualify for decision by the Defense Systems Acquisition Review Council (DSARC). Such systems are normally complicated, expensive, controversial or for any other reason involve top management of the Department of Defense. DAP are systems which do not qualify as major but are critically important to the Army. These systems will be subjected to intensive management reviews at HQDA by the Army Systems Acquisition Review Council (ASARC). Nonmajor systems are systems which do not meet the criteria for designation as major or DAP and which normally undergo in-process review. These are divided into four categories (cat. 1, 2, 3 and 4) for OT management purposes. Funding thresholds for major, DAP and nonmajor systems can be found in AR 1000-1.

Concept evaluation program (CEP). A TRADOC program which involves the use of specific RDTE funds for the conduct of a broad spectrum of tests and evaluations of new or modified hardware. It provides TRADOC center/school commanders a quick reaction capability and a simplified process for resolving or solidifying combat developments requirements.

Concept exploration phase. The first phase in the life-cycle system management model. The technical, military, and economic bases for the program and concept feasibility are established through pertinent studies and through the development and evaluation of experimental hardware. Threat projections, technological forecasts, and joint Army plans are examined by combat developers to determine operational capabilities, doctrine, organization, or potential materiel systems that will improve Army forces.

Cost and operational effectiveness analysis (COEA). A document prepared by a special task force or individually by the combat developer or jointly by the combat and materiel developer to evaluate single system concepts or compare alternative approaches. Its purpose is to establish whether or not the total costs projected for the systems or concepts are justified by the benefits the Army can expect to achieve. The COEA compares alternatives and determines whether cost/benefit ratios justify acquisition of a particular item or system.

Cost and training effectiveness analysis (CTEA). A systematic study which documents the costs and effectiveness of training alternatives for the system. The CTEA will provide input to the TRADOC combat and training development process by:

- a. Identifying training approaches for alternative systems.
- b. Constituting the source of training costs in COEA cost estimates.
- c. Evaluating training effectiveness of candidate training devices.
- d. Providing a basis for the training programs to support the systems in development.

<u>Customer test</u>. A test conducted by a test organization for a requesting agency external to TRADOC. The requesting agency provides funds and guidance for the test.

<u>Detailed test plan (DTP)</u>. A set of explicit instructions for directing every phase of the test, particularly test control, data collection, and data analysis (AR 70-10). The DTP is an internal document which is rarely circulated outside the test organization.

Environmental impact statement (EIS). A detailed environmental impact statement will be prepared and processed in accordance with the National Environmental Policy Act of 1969 (NEPA) whenever obvious facts or an environmental impact assessment (EIA) reveals that the proposed major action may significantly affect the quality of the human environment or may be controversial with regard to its environmental impact.

Evaluation plan (EP). A tester's master plan for evaluating an FDTE. It is simplier and less formal than an IEP and is used to guide development of the OTP and the TDP by the test organization. It contains the purpose of the FDTE, issues and criteria, outline of the scope and tactical context, and a listing of essential milestones.

Extension training. Training, either individual or collective, which is structured, developed and supported by the service schools, but is usually conducted at locations other than TRADOC service schools. (TRADOC Circular 350-3.)

FDTE-TEA (training effectiveness analysis). A limited category FDTE which permits testing and evaluation of alternative training concepts, developmental training devices and simulators, and training subsystems. FDTE-TEA may be

used to provide one source of data inputs for TEA. FDTE may be conducted prior to OT II to insure the single best training concept or subsystem is evaluated during OT II, to address training effectiveness issues for fully fielded systems, or to provide data for training subsystem effectiveness analyses (TSEA), CTEA, training developments studies (TDS) and other types of TEA identified in TRADOC Reg 350-4.

High risk tasks. Those critical operation or maintenance procedures which have high potential for performance shortfall and a corresponding adverse impact on overall system performance if soldiers are not trained to perform them to standard. These tasks are typically difficult to train because they are exceptionally complex and/or require a high degree of skill, and have either:

- a. High frequency of occurence on the job.
- b. Low task delay tolerance.
- c. High consequences if inadequately performed.
- d. Any combination of the above.

<u>Independent evaluation plan (IEP)</u>. A master plan for the evaluation of a total system's operational effectiveness. It is provided to the test organization to assist in the development of the outline test plan/resume sheet and test design plan.

<u>Independent evaluation report (IER)</u>. Provides an assessment of item, system or concept operational effectiveness and the adequacy of testing to that point in support of the decision review process.

Joint user testing. That development and user testing in which the Army participates with another service and which is conducted to evaluate Army items and systems or concepts having an interface with or requiring a test environment of another service; or items and systems, or concepts of another service which require testing in an Army environment.

<u>Lead test organization</u>. The test organization assigned overall responsibility for monitoring and coordinating a single test involving more than one TRADOC test organization.

Logistics oriented school. The TRADOC school responsible for developing support equipment requirements and training DS/GS logistics personnel. As required, this school will assist a TRADOC proponent in ILS planning for new materiel. The logistics oriented schools consist of the Quartermaster School, Transportation School, Missile and Munitions Center and School, and the Signal School. The commodity areas for which each school are responsible are designated in appendix A of TRADOC Reg 700-1.

Logistics supportability (LCG S). Those characteristics of materiel which measure its ability to adapt to changing supply and maintenance concepts, and to sustain operational availability targets through normal maintenance and supply activity.

Mean-time-between-failure (MTBF). For a particular interval, the total functioning life of an item divided by the total number of failures during the measurement interval. The definition applies to time, cycles, distance, events or other measures of life units (MIL-STD-721B).

Mission element needs statement (MENS). A conceptual exploration of the alternatives which may satisfy a major need. The MENS is limited to 10 pages and must cover the mission, the threat, required capabilities, and assessment of deficiencies and vulnerabilities, the impact of continuing with present systems, the plan to identify and explore competitive alternative concepts, and the resources required to pursue the plan. The MENS must be approved by HQDA. The MENS is only required for major and DAP systems. (Reference DOD Directive 5000.2.)

Mission profile. A description of the operational requirement(s) that a system must complete to accomplish a particular mission or set of missions. This profile will be used as the basis for mission reliability assessment. The tasks may be multifunctional (an item performing several tasks such as a tank shooting, moving, and communicating); single-function continuous (an item continuously performing one task such as a surveillance radar); single-function cyclic (an item performing the same task repeatedly such as a missile launcher or artillery piece); or single-function one-time (an item performing only a one-time task such as a missile or munition) and described in terms such as hours, miles, or rounds fired.

Non-developmental items (NDI). Items that include commercial products, material developed by other US military services or material developed by other countries which are determined by a material acquisition decision process (MADP) review to be available for acquisition to satisfy an approved requirement with no expenditure of RDTE funds for development, modification or improvement. RDTE funds may be used for testing (chapter 6, AR 70-1).

Non-developmental materiel system testing. Non-developmental materiel systems are required by AR 70-1, AR 70-10, and AR 71-6 to undergo test and/or evaluation prior to final type classification for make and model, unless a definitive decision is made by the combat developer and mission assignee agency, in coordination with the operational tester and logistician, that previous testing and other data provide sufficient evidence of acceptability. Testing prior to the final NDI type classification decision will be OT II.

On-site user testing (OSUT). Testing performed to insure adequacy of organization, logistics and training for certain items or systems which are being procured but will not be fielded Army wide (i.e., computers and instrumentation). These tests are similar to DT/OT III but are conducted on equipment at the operational site. OSUT also appies to NDI.

Operational issues. Those which must be evaluated considering the man and machine together as an entity to estimate the military utility, operational effectiveness, and operational suitability of the system in its complete user environment. Operational issues go beyond physical specifications to include mission performance, survivability, RAM, doctrine and techniques of employment, organization, personnel selection and training, cooperative systems and logistics support.

Operational mode summary (OMS). A description of the anticipated mix of ways the equipment will be used in carrying out its operational role. Includes

expected percentage of the use in each role and percentage of time it will be exposed to each type of environmental condition during the system life.

<u>Operational performance characteristics</u>. System characteristics fundamental to the effectiveness of a mission, including characteristics such as speed, range, and accuracy.

Operational test readiness statement (OTRS). A statement of the materiel system's readiness for operational test. It is provided by the materiel developer, the combat developer and the trainer to the command or agency responsible for OT.

<u>Safety assessment report</u>. A formal, comprehensive safety report that summarizes the safety data that has been collected and evaluated during the life cycle before a test of an item. It expresses the considered judgment of the developing agency or contractor regarding the hazard potential of the item and any actions or precautions that are recommended to minimize these hazards and to reduce the exposure of personnel and equipment to them.

<u>Safety release</u>. A document provided by TRADOC Safety Office (ATEN-S) prior to any testing involving the use of troops. Each safety release will express the specific hazards of the item or system and will include technical and operational limitations and precautions (AR 385-16).

Skill performance aids (SPAS). The skill performance aids program that integrates technical documentation and training into a composite package which provides a reference store of all information needed to operate and maintain an equipment system. The technical documentation contains fully proceduralized and highly illustrated instructions which enable novice technicians to perform complex tasks with little or no training. The training materials consist of supervised on the job training packages which teach the preliminary skills necessary to use the documentation in operating and maintaining the equipment. (NOTE: Use of the term SPAS and this definition supersedes use of the term ITDT-Integrated Technical Documentation and Training).

<u>Test and evaluation master plan (TEMP)</u>. Broad plans which identify and integrate objectives, responsibilities, resources and schedules for all T&E during acquisition. TEMP are summarized CTP and are required for DSARC monitored major systems. An OSD-approved TEMP is a prerequisite for the milestone II containing DT&E and OT&E test thresholds.

T&E methodology program. A program to support all current and future user testing, i.e., OT, FDTE and CEP. The program is used to identify new test techniques and procedures or to improve existing methodologies to insure proper assessment of test objectives; and to identify requirements for instrumentation.

<u>Test design plan (TDP)</u>. A formal document developed by the test organization which states the circumstances under which a test will be executed, the data required from the test, and the methodology for analyzing test results.

Test integration working group (TIWG). "Charter" working group designed to facilitate the integration of test requirements through close coordination between the materiel developer (DARCOM), the combat developer (TRADOC), and the operational tester (TRADOC) in order to minimize developmental time and cost, and preclude duplication between developmental and operational testing.

The primary purposes of the TIWG are: assist the developers in the preparation of the TEMP and coordinated test program (CTP); monitor the test program progress; and update the TEMP and CTP as required. Membership includes representatives of the combat developer (TRADOC), logistician (LEA), operational tester (OTEA or TRADOC), AMSAA, TECOM, materiel developer (DARCOM) and when appropriate, the contractor (AR 70-10). Required for major, DAP and category 1 nonmajor systems.

Test management information system (TMIS). An automated management information system designed to provide the Deputy Chief of Staff for Test and Evaluation (DCSTE) and his principle managers with timely, accurate, and comprehensive information to support the planning and execution of the TRADOC test and evaluation program.

Test organization. The organization responsible for planning, conducting and reporting the test.

<u>Test resource management system (TRMS)</u>. TRMS is a management information system application designed to provide timely, accurate and comprehensive information on the status of test workload and for the analysis, evaluation and management of this workload (TRADOC Reg 71-7).

Test support package (TSP). Test and evaluation of items/systems will include the test support packages provided by the materiel developer and combat developer/trainer. The materiel developer provides packages consisting of the maintenance support for the item/system and a new equipment training package. The other portions of the package are furnished by the combat developer/trainer and include: statement of doctrine and techniques for employment, statement of organization and basis of issue, training plan, statement of logistics support concepts, mission profiles, statement of suitable threat for test based on approved threat, and a description of the appropriate test setting, including typical terrain and friendly forces situation.

TRADOC Instrumentation Technical Support Program. A program to coordinate technical expertise within the testing community.

TRADOC system manager (TSM). Appointed by CG TRADOC following program initiation (milestone 0) for major and designated acquisition programs. This will provide for the coordinated development and integration of user requirements as well as test support packages from the onset of program evaluation. The TSM is responsible for coordinating the combat developer, user, and trainer efforts in the life cycle management of the assigned system.

TRADOC systems staff officer (TRASSO). Designated within HQ TRADOC for major, DAP and nonmajor systems. Each TRASSO functions as the HQ TRADOC single point of contact for his assigned system.

<u>User testing</u>. A generic term encompassing operational testing (OT), force development test and experimentation (FDTE), and the concept evaluation program (CEP).

#### APPENDIX B

## SYSTEM PERFORMANCE REPORT (SPR)

#### RCS ATTE-2

- B-1. General. System performance reports (SPR) are the primary means utilized by TRADOC test organizations to quickly inform TRADOC test proponents, DARCOM materiel developer proponents, TRADOC customer test sponsors and other interested activities of test incidents. These reports are applicable to all test incidents occurring during user tests conducted by TRADOC test organizations; e.g., OT and FDTE. Reportable test incidents include but are not limited to any of the following conditions observed after receipt of the test items and/ or the system support package by the test organization. (This includes incidents/shortages which occur during the receipt inspection(s), pretest training and pilot test.)
- a. Mechanical or technical malfunctions of hardware and software items undergoing test.
- b. Discrepancies, inadequacies and/or other problems involving content or application of training concepts/programs, logistics concepts, tactical and doctrinal concepts, systems support package, etc.
- c. Mechanical and technical malfunctions of test measurement and diagnostic equipment (TMDE) and other logistics support material required for operation and maintenance of the test item.
- B-2. Preparation. The test organization will initiate TRADOC Form 412-R (System Performance Report, fig. B-1) immediately after the incident occurs. Instructions for preparation of the SPR are contained in paragraph B-6. Occurrence of a critical incident (as defined in paragraph B-63 instruction for block 24 of SPR) requires expedited telephonic notification to organizations cited in B-2a through B-2c below as applicable to the test being conducted. These telephonic notifications will be accomplished within the span of 8 normal duty hours at the organization performing notification after incident occurrence. Distribution of the SPR will serve as a followup to the telephonic notification.
- a. For all OT, FOE and IOC-FDTE, notify HQ TRADOC DCSTE (ATTE-ZA) POC, TRADOC test proponent POC, and material developer proponent POC.
- b. For all FDTE (other than IOC-FDTE) and CEP, notify HQ TRADOC DCSTE (ATTE-ZA) POC, TRADOC test proponent POC, and, when appropriate, materiel developer proponent POC.
- c. For all customer tests, notify HQ TRADOC DCSTE (ATTE-ZA) POC and customer POC.

- B-3. <u>Processing</u>. Unless formally directed otherwise by HQ TRADOC (ATTE-ZA), approved SPR will be distributed by the test organization within time frames not to exceed the following:
- a. Five working days after date of incident for all incidents classified as critical in block 24.
- b. Five working days after date of incident for other than those classified as critical for incidents occurring at a test site located at the home site of the test organization.
- c. Fourteen working days after date of test incident for other than those classified as critical when the test site is other than the home site of the test organization.
- B-4. <u>Distribution</u>. Distribution of the SPR will be in accordance with the distribution list appendixes of the test design plan (TDP). Guidance for preparation of the list is also provided in appendix E, this regulation. In addition, coordination actions may identify additional/specific organizations to be included for distribution of SPR for a particular test. The SPR will be addressed to the TRADOC test proponent (except for customer tests) with additional distribution addresses listed in the space provided on the back of the SPR. One copy of each SPR classified critical in block 24 and all supplements thereto should be provided HQ TRADOC DCSTE (ATTN: ATTE-ZA).
- B-5. Review of SPR. During the conduct of each test, the test organization will periodically review SPR to assure that the information reported is accurate and complete and to determine whether the classification of the incident requires revision. These reviews will be conducted by the test organizations as a minimum at midpoint and completion of tests. Information revealed, or revisions to SPR resulting from reviews, will be forwarded by supplemental SPR. Instructions for preparation of the supplement are presented in paragraph B-7.

## B-6. Contents of the SPR.

#### a. General.

- (1) An SPR will be used to report the occurrence of a single test incident. However, separate SPR are not required when an incident involves a problem (such as a design defect) which can be determined by inspection or examination to be common to other samples of the test item accessible to the test activity. In such instances, one SPR will be prepared and block 28, Incident Description, will contain an elaboration of the finding that the problem is common to other samples of the test item. The major item data and part data entries will pertain to all samples on which the problem was found.
- (2) An entry must be made in each block on the form. In the event data are not available for any block, enter "UNK" or "NA" as appropriate. If insufficient space is available in a particular block, the words "see block 28" will be entered and the information continued in block 28 following an entry "BLOCK", Cont."

b. Heading.

REPORT DATE: Date SPR is dispatched by test organization (typed in final form for distribution).

TO: Address to TRADOC test proponent for OT, FDTE, and CEP. Address to test sponsor for customer tests. Forward copies to additional distribution addresses cited on reverse side of the SPR.

FROM: Test organization address format as shown in the following example.

EXAMPLE: President

US Army Infantry Board

ATTN: ATTB-IB-(appropriate symbol)

Fort Benning, GA 31905

BLOCK 1A. Number SPR consecutively for each test project. The SPR number is an alphanumeric code that identifies the reporting activity and the SPR sequence number and supplements to previous reports.

- (1) The first part of the number will be the two letters, which are, the activity coding for test organization in accordance with TRADOC Reg 71-7, TRMS.
- (2) The second part of the number will be an arabic numeral indicating the sequence of the report. For example, the first SPR submitted for test project will be numbered "XX-1," the second report will be "XX-2," and so forth.
- (3) Additional elements may be added to the number to show that this particular SPR is supplementing a previously reported incident. Supplementary SPR are identified by the addition of the letter "S" and an arabic numeral signifying the number of supplements issued. For example, the second supplement to SPR number NL-5 would be numbered NL-5-S2.
- BLOCK 1B. Indicate SPR number for all related incidents. Related incidents are those occurring at the same time or otherwise causing or influencing the reported incident.
- BLOCK 2. Complete TRMS project as applicable to the test project.
- BLOCK 3. Complete test title, e.g., OT II of XM217 Lightweight Tent, or FOE of M116 Armored Assault Vehicle. Include abbreviated test title in parenthesis, e.g., (OT II XM217), (FOE M116).
  - c. Section I Major Item Data
- BLOCK 4. Major item model number or nomenclature.
- BLOCK 5. Major item serial number, i.e., manufacturer's or developer's serial number prototype number.

- TRADOC Reg 71-9
- BLOCK 6. Number of samples of major item to which this particular SPR applies.
- BLOCK 7. Manufacturer of major item.
- BLOCK 8. USA registration number, if applicable.
  - d. Section II Part Data.
- BLOCK 9. Nomenclature and/or description of part involved in incident. Use noun name of the part, if applicable, followed by a description adequate to locate the part in a particular Government group. Enter prefix <u>EXP</u> before experimental part names or numbers.
- BLOCK 10. National stock number.
- BLOCK 11. Manufacturer's part number.
- BLOCK 12. Drawing number.
- BLOCK 13. Manufacturer of part.
- BLOCK 14. Use arabic numerals to show the number of identical incidents discovered at the same time on the same major item or the same part. For example, if one sprocket bolt sheared on one test vehicle, enter "1;" if two sprocket bolts sheared on each of the two test vehicles, enter "4." If the RAM box is checked in block 25, the number of failures and/or maintenance actions and associated test life data for each must be detailed in Block 28.
- BLOCK 15. Next higher assembly, e.g., generator, engine, module, etc.
- BLOCK 16. Standard Government group specified in applicable technical manual (TM) or technical bulletin (TB).
- BLOCK 17. Accumulated test life period of the part being reported. Appropriate entries include the number of operating hours, rounds fired, operating cycles, odometer miles, days of use, or other terms of time, distance, or scope that appropriately express the extent of test activity.
  - e. Section III Incident Data
- BLOCK 18. Date of occurrence of incident.
- BLOCK 19. When reporting a suggested improvement, check sub-block bound and do not make an entry in block 24. In all other situations mark sub-block bar and classify the incident in block 24 by checking the appropriate options.
- BLOCK 20. Check appropriate sub-block indicating action taken to continue test. If testing is suspended as a result of the incident, indicate in Block 28.

BLOCK 21. From the following list of Logistics Support Element Codes, enter the code which identifies the element most affected by the incident being reported. The code "NA" is used when none of the codes are applicable. Examples of elements other than logistics support that are affected by the incidents include performance degradation, safety hazards, human factors problems, and criteria not met.

# Logistics Support Element (LSE) Codes

TP	Technical Publications
RP ·	Repair Parts
TL	Tools
GSE	
	Ground Support Equipment
ST	Skills and Training (New Equipment
	Training (NET))
TA	Technical Assistance
MF .	Maintenance Float
CAL	Calibration
RAM	Reliability, Availability, and Main-
MAP	
TUDE	tainability
TMDE	Test, Measurement, and Diagnostic Equip- ment
TH	Transportation and Handling
FA	Facilities
LMC	Logistics/Maintenance Concept
SS	Supply Support
NP	Number of Personnel
NA	Not Applicable (only used if none of
	the above codes apply)

- <u>BLOCK 22</u>. Check the appropriate sub-block to indicate when the incident was first noted. When sub-block  $\underline{d}$  is used, include an explanation in block 28.
- <u>BLOCK 23.</u> Describe the test environment when the incident occurred. For example, the following, or combinations thereof, are considered as possible entries: paved road, water crossing, cross-country, heavy rain, portability test, fuze functioning delivery by parachutist, maximum rated load, etc. When applicable, the appropriate paragraph of a MIL-STD or military specification will be cited.
- <u>BLOCK 24</u>. For an SPR marked "Information" in block 19, make no entry in this block; otherwise, mark the appropriate block in accordance with the following criteria:
- (1) Critical test incident. An incident of concern occurring during test which makes test suspension advisable, and which includes catastrophic safety hazards. This type of incident must be reported by telephone to the applicable activities as soon as possible (para B-2). The SPR is a follow-on report. The existence of an incomplete system support package (SSP) to support start of OT II or FOE will be classified as a critical test incident and will be reported by message with recommendations required by paragraph 1-11e, AR 700-127.

- (2) Major test incident. An incident of concern occurring during testing which involves significant degradation in mission capability or safety.
- (3) Minor test incident. An incident of concern occurring during testing which involves desirable but not imperative improvement(s) to operability, durability, reliability, maintainability, transportability, or human factors aspects, and which does not have serious impact(s) on mission capability or safety.
- $\underline{\text{BLOCK }25}$ . Check one or more blocks as appropriate to fully describe the  $\underline{\text{type}(s)}$  of incident. The possible entries are self-explanatory with additional explanation that the "machine/mission/interface" block is used when an incident resulted from using the item on a particular mission which it could not execute or complete.
- BLOCK 26. If RAM was not checked in block 25, make an entry in this block. If RAM was checked in block 25, provide RAM data indicated by sub-items "a" and "b" for this block. There is no requirement that every box or block be filled. Rather, boxes and blocks should be filled as applicable and appropriate to the item under test based on the TDP and DTP.
- BLOCK 26a. Indicate tester initial chargeability assessment based on established failure definitions/scoring criteria (FD/SC). RAM test incidents are separately scored against hardware and operational reliability as system failure (SF), mission failure (MF), or nonchargeable (NC) with the appropriate criterion from the applicable FD/SC being shown as the reason for classification. Some systems may be subjected to either mission or system failure definitions while others may require both measures. Hardware reliability applies to measurement of reliability characteristics of the hardware and software being developed or otherwise acquired. FD/SC applicable to this area are to be provided by joint agreement of the combat and material developers (AR 702-3). Operational reliability attempts to measure reliability characteristics of the operational system in the operational environment. An operational system is composed of the hardware system, associated standard equipment, crews, and support required for mission performance in the operational environment. Operational environment includes the logistics system, personnel, training, tactics, doctrine, etc., applicable to the operational system. FD/SC applicable to operational reliability may be provided through materiel and combat developer joint agreement or by agreement among the TRADOC test organization, TRADOC test proponent, and TRADOC RAM independent evaluator if the materiel and combat developers' agreement is unavailable.
- <u>BLOCK 26b.</u> Provide appropriate maintenance time data in blanks provided whether maintenance performed is scheduled or unscheduled. While materiel and combat developers may have agreed upon specific definitions to be used which differ from the following, these definitions are provided as a general guide when specific definitions are not available:
- (a) ACTIVE MAINTENANCE TIME hands on equipment maintenance time (includes preparation, diagnostic, repair, replace service, clean-up, and checkout times) reported in clock minutes/hours as appropriate to the test item.

- (b) MAINTENANCE MAN HOURS active maintenance time reported in man hours.
- (c) TOTAL DOWN TIME elapsed time from the time the item became unavailable/uncommitable until maintenance is complete and the item is returned to commitable status recorded in clock hours. Dependent upon the incident, an item becomes unavailable/uncommitable at the point of occurrence of the following:
  - 1. Malfunction/failure rendering the item uncommitable.
- 2. Delivery of a commitable item to the maintenance organization for scheduled maintenance.
- $\underline{3}$ . Delivery of a commitable item to the maintenance organization for unscheduled maintenance required to correct reported malfunctions/failures on individual components of the item.
- BLOCK 27. Enter the accumulated test life of the major item at the time of the incident (rounds, miles, hours, cycles, etc.).
- BLOCK 28. Fully describe the incident. As appropriate, include reasons for assigning incident classification in block 24. Provide answers to the when, what, and why of the incident so that the test proponent and materiel developer will have sufficient information upon which to base corrective action. In the event the SPR is reporting the recurrence of an incident on the same project, this fact will be reported regardless of whether or not the incident involves the same item under test. Whenever possible, indicate if the cause of the incident is improper design (i.e., improper materiel, overstressing, interferring parts, or other design problems) or improper manufacture, use, operation, or maintenance. If the cause is a matter of opinion, so indicate. Include additional description of the test environment in instances where the description shown in block 23 requires clarification. Include positive actions which appear to be capable of correcting the problem. Note injuries or property damage resulting from the incident. Additional space is provided on the reverse side of the SPR. Attach photos, sketches, or continuation sheets, as required. Fully explain and support the entries made in Block 25. Also see guidance at paragraph B-6a(1) and for blocks 14, 20 and 22 for additional data to be included in this block.
- BLOCK 29. Enter the activity to which defective material was sent; otherwise enter the word "RETAINED."
- BLOCK 30. Enter the name, rank, branch, title, and AUTOVON telephone number of the test officer.
- <u>BLOCK 31</u>. Insert the appropriate signature and signature block for the test organization.
- f. Reverse side of form: Continue incident description (block 28) and list all the addressees on the reverse side of the completed form in spaces provided.

- B-7. Preparing the SPR Supplement. The SPR supplement will be prepared on TRADOC Form 412-R. Instructions for the preparation of blocks are contained in paragraph B-6 above unless exceptions are stated below. As a minimum, the following blocks will be completed, as well as other blocks requiring change or supplementation:
  - a. Date:
  - b. To:
  - c. From:
- d. BLOCK 1A: Enter the number of the SPR being supplemented, the letter "S," and a number to indicate the number of the supplement, e.g., the second supplement to SPR NL-2 would be number NL-2S2.
  - e. BLOCK 2:
  - f. BLOCK 3:
- g. BLOCK 28: Include rationale for the change or additional information (do not repeat the original description).
  - h. BLOCK 30:
  - i. BLOCK 31:

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SYSTEM		RMANCE REPORT	•				· ATTE-2
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B. Related SPR;							,
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7. MFR			١.	. USA Number			
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9. NOMENCLATURE/DESCRIPT	ION						
10. NSN			11	. MFR Part Numbe	er		
12. Drawing Number			_	MFR			
Quantity     MAC Functional Group			_	Next Assembly			
		III - INCIE		Part Test Life			
18. Date of Occurrence			19.		EPORT	20.	ACTION TAKEN
21. Log Spt Elm Code				a. Incident			a. Replaced
	23. TEST	ENVIRONMENT		b. Information			b. Repaired
a. Operation			24.	RECOMMENDED	CLASS		c. Adjusted
b. Maintenance c. Inspection				a. Critical b. Major		_	d. Disconnected e. Removed
d. Other				c. Minor			f. None
25. TYPE OF INCIDENT (Check as	appropria	te) Safety	_	Human Factors	<u> </u>	RAM	
Training Tacti	ics [		— Sche	eduled Maintenance	<u>.</u>		/ lamo zog sapport
Machine/Mission Interf	_	Man/Machine			_	e/Ma	chine Interface
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Operational Reliability			_				
b. Maintenance Time: Active Main	t Time	Maint Man Ho	urs _	Total	Down Tim	e	
27. Item Usage (Mileage, Hours, Ro	ounds, etc.	.)				-	
28. Describe as a minimum situation	at time o	f incident, corrective a	actio	n taken, and effec	t of incide	nt (mi	ust include all
Block 25 checked)							
FAILURE AND INCIDENT CLAS	SIFICAT	ION IS SUBJECT TO	RE	CLASSIFICATION	ON/SEE D	IST	RIBUTION ON REVERSE
SIDE/ADDITIONAL INCIDENT D							
29. Defective Material Sent to:							
30. NAME, TITLE AND TELEPHONE E	XTENSION	OF PREPARER		31. FOR THE	COMMAND	ER:	

28. Continued	
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Figure B-1 (Continued)

#### APPENDIX C

# INSTRUCTIONS FOR PREPARATION AND SUBMISSION OF A CEP RESUME SHEET (RS)

### RCS ATTE-3

- C-1. Submit to Cdr, TRADOC, ATTN: ATTE-ZC, Ft Monroe, VA 23651 (NOTE: Address of ADCSTE, TRADOC) annually NLT 30 June each calendar year.
- C-2. Instructions for submission of RS are:
- a. Section I Test Description (fig. C-1). This includes the what, where, why and how of the test or evaluation.
- b. Section II Cost Estimate (fig. C-2). This section provides an outline of all of the cost areas that are involved in the test. It serves as the basis for funding and must be coordinated with all participants to insure completeness and accuracy.
- c. Section III Materiel Description (fig. C-3). This section provides a description of the item of equipment to be evaluated. It should include a photograph or drawing of the CEP candidate.
- d. Section IV Questionnaire (fig. C-4). This section includes a series of questions that explore the relationship of the concept and its test item's applicability to the overall materiel acquisition process. Its purpose is to insure that the proposed CEP is applicable to the program and not to a planned or previously approved developmental program.
- e. Section V Issues to be Evaluated. This section includes issues, criteria and rationale that the evaluation will answer. This will assist the test organization in the preparation of the test design plan and aid the proponent in completing the proponent evaluation.

# RÉSUMÉ SHEET FOR CEP TESTING

SECTION I: TEST DESCRIPTION

- A. TEST TITLE:
- B. TEST TYPE: CEP
- C. TEST PROPONENT:
- D. TEST ORGANIZATION:
- E. TEST UNIT:
- F. TEST LOCATION:
- G. TEST DATES:
- H. TEST PURPOSE:
- I. TEST OBJECTIVES:
- J. SCOPE:
- K. RESOURCE REQUIREMENTS:
  - a. Test Directorate
  - b. Player Participants
  - c. Test Facilities/Installation Support
  - d. Items to be Tested
  - e. Ammo, Missiles, Pyrotechnics
  - f. POL Supplies
- L. TEST MILESTONES: (Test Design Plan forwarded for approval, Test Design Plan approved, Begin Test; End Test; Test Report; Proponent Evaluation)
- M. POC: Test Director, name, rank, address, and AUTOVON telephone number.
- N. COORDINATION: Organizations that proposed CEP was coordinated with, to include address and telephone number.

Figure C-1. Test description.

#### SECTION II: COST ESTIMATE

- A. Number of items to be obtained: (To include cost per item).
- B. Modification costs: (Total modification costs for all equipment to be obtained.)
- C. Evaluation costs: (Provide general breakdown of funds.)
- D. Travel costs: (Include all travel/TDY, i.e., trips to monitor evaluation, purchasing arrangements, demonstrations, etc. Do not include training. Travel and TDY should include the number of people, length of time and to where from where.)
- E. Training costs: (If government has to pay for training, indicate the cost, the number of people to be trained, where, by whom, and the expected duraiton of training. Also include total training TDY requirement. If training will be required but at no expense to the government except for TDY, indicate "training required at no expense to the government." Then indicate total amount of TDY.)
- F. Transportation/shipment of items costs: (Cost of shipping item to evlauation site.)
- G. Refurbishment costs: (If required.)
- H. Other: (Identify)

TOTAL FUNDS REQUIRED: (Enter total cost of entire evaluation.)

I. COST SUMMARY (\$ IN THOUSANDS)

FΥ

FΥ

RDTE

# SECTION III: MATERIEL DESCRIPTION

- A. EQUIPMENT DESCRIPTION: Identify the size, weight and what the item is supposed to do.
- B. EQUIPMENT IDENTIFICATION: Provide a photograph, sketch or diagram of item.

SECT	TION IV.	QUESTI	ONNA I RE					
	Have any be evalua		follow	ing docum	ents be	en prepar	ed on th	ne item(s)
		•					YES	NO
	1. Draf (LOA)?	t or Apı	proved	Letter of	f Agreem	ent		
	2. Draf Capabili			Required(	)peratio	nal		
		t or App	proved	Letter Re	qui reme	nt (LR)?		
	4. Draf			Training	Device	Letter		
	5. Draf			Training	Device			
	6. Draf			Training	Device	Letter		
	If "yes"				give ful	l details	to incl	ude TRADO

- C. Are any of the above documents being prepared on the item(s) to be evaluated? If yes, give full details.
- D. Is the item to be evaluated already in the inventory of another service? If yes, which service and can it be obtained by loan?
- E. Is the item to be evaluated already in the inventory of a BCA (British-Canadian-Australian) nation? If yes, which nation and can it be obtained through the International Standardization Loan Program?
- F. Is the item to be evaluated already in the inventory of an allied nation (other than BCA)? If yes, which nation?
- G. Where should funding documents be sent? Provide the following information: Full mailing address to include office symbol and zip code, name of individual and telephone number.

## APPENDIX D

#### COORDINATION GUIDANCE

#### DRAFT TEST DOCUMENTS

D-1. <u>Purpose</u>. This appendix contains distribution guidance for coordination of draft test documents prepared by TRADOC test organizations and proponents. Specific organization addresses have been identified when applicable. Proponent school/center, materiel developer, and test organization addresses vary depending on system undergoing test and are to be determined by the organization originating the document. Test reports and SPR are not listed since coordination prior to approval is not required.

# D-2. Coordination guidance.

- a. Activities designated with a (X) will receive a copy of the specified document for review and comment/concurrence during the coordination process. Thirty days should be allowed for the coordination, however, a minimum of 15 days is essential. Concurrence may be assumed for those agencies not responding except those which have approval authority for the given document.
- b. Activities designated with a (0) will be provided a copy of the specified document for the purpose of monitoring the program. Comments will be provided only in exceptional cases when deemed necessary.
- c. IER coordination will be restricted to internal TRADOC community and OTEA. Draft IER will not be coordinated with or provided the material developer or LEA.
- d. OTP coordination within TRADOC, DARCOM, and DA community occurs during each TSARC cycle. Prior to conduct of TSARC, the test organization coordinates new and revised OTP with the materiel developer and proponent school/center to insure correctness of data presented.

## DISTRIBUTION GUIDANCE

#### COORDINATION DRAFT TEST DOCUMENTS

ORGANIZATION	IEP	<u>OTP</u>	TSP	TDP	<u>IER</u>
USATRADOC ATTE-ZA (Ft Hood) ATTE-ZC (Ft Monroe) ATCD	0 0 X		0 0 X	0 0 X	0 0 X
ATEN-S USACAC (ATZL-CAT-E) USALOGC (ATCL-M) USATSC (ATIC-DS)	X X X		0 X X	X X X	X X X
USASOLDIERSPTCEN (ATZI-NCR-PS) TRADOC proponent school/center	Х	Χ	X	X X	Х
TRADOC coproponent school/center TRADOC test organization	X	X	X X	X	Χ
Materiel developer	Х	Х	Х	Х	

ORGANIZATION	<u>IEP</u>	<u>OTP</u>	TSP	TDP	IER
USAOTEA (CSTE-PON) USALEA (DALO-LEI) USATECOM (DRSTE-TO) USAAMSAA (ANXSY-DD) Development tester	X X X X		χ <u>1</u> / χ	X X X X	Х

 $\underline{1}$ /Only when OTEA is the test organization.

## APPENDIX E

# APPROVED DOCUMENTS DISTRIBUTION GUIDANCE

E-1. <u>Purpose</u>. This appendix contains distribution guidance for approved plans and reports prepared by TRADOC test organizations and proponents. Distribution is not limited to addressees contained in this appendix but may be expanded by TRADOC LOE or other means. The activity preparing the plan or report distributes the number of copies indicated in the appropriate column. Letter codes are explained in the legend.

# E-2. Legend.

- a Coordinate when system is of concern to activity.
- b( ) When system is of concern to addressee (no. of copies).
- c Coordinate (major, DAP and category 1 systems).
- d HQ TRADOC will distribute to addressee.
- e( ) Major, DAP, category 1, category 2, category 3, and category 4 OT.
- f( ) When proponent (no. of copies).
- g( ) When test organization (no. of copies).
- h( ) When materiel developer (no. of copies).
- i( ) When LOG-oriented school (no. of copies).

ORGANIZATION	IEP	OTP	TSP	TDP	TEST REPORT	<u>IER</u>	SPR
USATRADOC ATTN: ATTE-ZA (Ft Hood)* ATTE-ZC (Ft Monroe)* ATEN-S (Ft Monroe) Appropriate TRASSO-ATCD		1 2	1	2 1 1	2 1	1	1
USAOTEA ATTN: CSTE-PON CSTE-TDD 5600 Columbia Pike Falls Church, VA 22041	1	d	g(1)	3(2)	2	1	b(1)
USAADS ATTN: ATSA-CD-MS Ft Bliss, TX 79916	a	ā	a	f(2)	f(10), 1	a	b(1)

<sup>\*</sup>See paragraph E-3 for mailing addresses.

					T50.T		
ORGANIZATION	IEP	<u>OTP</u>	TSP	<u>TDP</u>	TEST REPORT	IER	SPR
USAARMC ATTN: ATZK-CD-TE Ft Knox, KY 40121	a	a	a	f(2)	f(10), 1	a	b(1)
USAAVNC & Ft Rucker ATTN: ATZQ-D-T Ft Rucker, AL 36360	a	a	a	f(2)	f(10), 1	<b>a</b> .	ь(1)
USAES ATTN: ATZA-CDE Ft Belvoir, VA 22060	a	a .	a .	f(2)	f(10), 1	a	p(j)
USAFAS ATTN: ATSF-CD Ft Sill, OK 73503	a	a	a	f(2)	f(10), 1	a	b(1)
USAIS ATTN: ATSH-CD Ft Benning, GA 31905	a	a	a	f(2)	f(10), 1	a	b(1)
USAIMA ATTN: ATSU-CD Ft Bragg, NC 28307	a	a	a	f(2)	f(10), 1	a	b(1)
USAICS							
ATTN: ATSI-TE-CO ATSI-CD-A Ft Huachuca, AZ 85613	a a	a a	ā ā	f(2) f(2)		a a	b(1) b(1)
Comdt, USAMPS ATTN: ATZN-MP-CT Ft McClellan, AL 36201	a	a	a	f(2)	f(10), 1	a	ь(1)
Comdt, Chemical School ATTN: ATZN-CM-CT Ft McClellan, AL 36201		a	a	f(2)	f(10), 1	a	b(1)
USAMMCS ATTN: ATSK-CM Redstone Arsenal, AL 35897	a	a	a	a(2) i(2)	f(10), 1	a	b(1)
USAOCS ATTN: ATSL-CD APG, MD 21005	a	a	a	f(2)	f(10), 1	a	ь(1)
USAQMS ATTN: ATSM-CTD Ft Lee, VA 23801	a	a	a	f(2)	f(10), 1	ā	ь(1)

ODCANT ZATION	IEP	ОТР	TSP	TDP	TEST REPORT	IER	SPR
ORGANI ZATION					f(10), 1		b(1)
USASC&FG ATTN: ATZH-BDC Ft Gordon, GA 30905	a	a	a	Τ(2)	T(10), 1	α	5(1)
USATSCH ATTN: ATSP-CD-TE Ft Eustis, VA 23604	a	a	a	f(2)	f(10), 1	a	b(1)
USATSC ATTN: ATIC-DST-PM Ft Eustis, VA 23604	1	1	1	1	1	ij	b(1)
USAADBD ATTN: ATZC-DQ Ft Bliss, TX 79916	a	a	g(1)	1	1	a	
USAABNBD ATTN: ATXA-BDP Ft Bragg, NC 28307	a	a	g(1)	1	1	a	
USACEBD ATTN: ATZH-BD Ft Gordon, GA 30905	ā	a	g(l)	1	1	a	
USAARENBD ATTN: ATZK-AE-OP Ft Knox, KY 40121	a	a	g(1)	1	1	a	
USAFABD ATTN: ATZR-BDOP Ft Sill, OK 73503	a	a	g(1)	1	1	a	
USAIB ATTN: ATZB-IB-PO Ft Benning, GA 31905	a	ā	g(1)	1	1 .	a .	
USA Chemical School ATTN: ATZN-CM-CDT Ft McClellan, AL 36205	a	a ·	g(1)		1	a	
USATCATA ATTN: ATCT-OP-P Ft Hood, TX 76544	a	a	g(1)	1	1	a	
USACDEC ATTN: ATEC-PL Ft Ord, CA 93941	ā	a	g(1)	ī	٠ .	a	

ORGANI ZATION	IEP	<u>OTP</u>	TSP	TDP	TEST REPORT	IER	SPR
USACAC ATTN: ATZL-CAT-E Ft Leavenworth, KS 66027	5	1	1	2	5	5	2
USALOGC ATTN: ATCL-M Ft Lee, VA 23801	2	2	a(1)	2	2	2	2
USASSC ATTN: ATZI-NCR-PS Ft Ben Harrison, IN 46216	1	1	1	1	1	1	1
USAAVNBD ATTN: ATZQ-QT Ft Rucker, AL 36362	a	, <b>a</b>	g(1)	1	1	a	
USAISBD ATTN: ATSI-BD-P Ft Huachuca, AZ 85613	a	a	g(1)	1	1	a	
USA Agency for Avn Safety ATTN: USAAVS Ft Rucker, AL 36362					b(1)		b(1)
USACC ATTN: CC-OPS Ft Huachuca, AZ 85613		a			b(1)		b(1)
USALEA ATTN: DALO-LEI New Cumberland Army Depot New Cuberland, PA 17070	1		1	1	1	1	1
USAMSAA ATTN: ANXSY-DD Aberdeen Proving Ground, MD 21005	1				1	1	1
USA Nuclear Agency ATTN: ATCN Ft Bliss, TX 79916	ā	ā	ā		b(1)	a	
USANARADCOM ATTN: DRDNA-EPT Natick, MA 01760	b(1)	ā		a	ь(1)	b(1)	b(1)
USATRASANA ATTN: ATAA-DT White Sands Missile Range, NM 88002	1			1	1	1	2

					TECT		
ORGANIZATION	<u>IEP</u>	<u>0TP</u>	<u>TSP</u>	TDP	TEST REPORT	IER	SPR
USA Academy of Health Sciences ATTN: HSA-CDM HSA-ETE Ft Sam Houston, TX 78232	b(1)					ь(1)	b(1)
USATECOM ATTN: US Army TRADOC LO Aberdeen Proving Ground, MD 21005	2	2	2	2	1	2	2
USADARCOM Materiel Readiness Sup- port Activity ATTN: DRXMD-EI Lexington, KY 40511					1	1	1
USAARDC ATTN: DRDAR-TSB-S USA Ballistic Research Laboratory Aberdeen Proving Ground, MD 21005	a	a	a	f(2)	f(10)	a	b(1)
Director US Army Human Engineer- ing Laboratory ATTN: DRXHE-D Aberdeen Proving Ground, MD 21005	1	1	1	1	1	1	1
USATACOM ATTN: DRDTA-A Warren, MI 48090	h(2)			a	h(5)	h(2)	b(1)
USAERADCOM ATTN: DRDEL-PO/DRDEL-PA Adelphi, MD 20783	h(2)			a	h(5)	h(2)	b(1)
USAMERADCOM ATTN: ERDME-UT Ft Belvoir, VA 22060	h(2)			ā	h(5)	h(2)	b(1)
USAARRADCOM ATTN: ATFE-LO-AC Dover, NJ 07801	h(2)			ā	h(5)	h(2)	b(1)
USADESCOM ATTN: DRSDS-AS Letterkenny Army Depot Chambersburg, PA 17201	h(2)			a	h(5)	h(2)	b(1)

					TECT		
ORGANIZATION	IEP	<u>OTP</u>	TSP	TDP	TEST REPORT	IER	SPR
US Marine Corps Development & Education Center ATTN: OT&E Div Quantico, VA 22134					1		
US Air Force Tactical Air Warfare Center ATTN: TE Eglin AFB, FL 32542					1		
USADARCOM ATTN: DRCDE-S Alexandria, VA 22333					1		1
USATECOM ATTN: DRSTE-TO Aberdeen Proving Ground, MD 21005					1		
USAAYRADCOM ATTN: DRSAV 4300 Goodfellow Blvd St Louis, MO 63120	h(2)			a	h(5)	h(2)	b(1)
USACECOM ATTN: DRSEL Ft Monmouth, NJ 07703	h(2)			a	h(5)	h(2)	b(T)
USAMICOM ATTN: DRSMI Redstone Arsenal, AL 35809	h(2)			a	h(5)	h(2)	ь(Т)
USAFORSCOM ATTN: AFOP-CM Ft McPherson, GA 30330		ā			2		
Defense Documentation Center Cameron Station ATTN: DDC-TCA Alexandria, VA 22314 (On DD Form 1473)	1				1	1	
USAARRCOM ATTN: DRSAR Rock Island, IL 61201	h(2)	٠		a	h(5)	h(2)	b(1)

# E-3. Mailing addresses for DCSTE, TRADOC.

- a. DCSTE Commander
  US Army Training and Doctrine Command
  ATTN: ATTE-ZA
  Fort Hood, TX 76544
- b. ADCSTE (Resources & Policy) Commander
  US Army Training and Doctrine Command
  ATTN: ATTE-ZC
  Fort Monroe, VA 23651
- c. ADCSTE (Operations) Commander
  US Army Combat Developments Experimentation Command
  ATTN: ATTE-ZB
  Fort Ord, CA 93941

NOTE: If an agency is an unnecessary recipient of any of the above documents, it is that agency's responsibility to notify the originator for removal from the Distribution List or notification of incorrect office symbols or mailing addresses.

#### APPENDIX F

## REFERENCE PUBLICATIONS

# F-1. Army Regulations.

- a. AR 15-14. Systems Acquisition Review Council Procedures.
- b. AR 70-1. Army Research, Development, and Acquisition.
- c. AR 70-10. Test and Evaluation During Development and Acquisition of Materiel.
  - d. AR 70-15. Product Improvement of Materiel.
  - e. AR 70-25. Use of Volunteers as Subjects of Research.
- f. AR 70-27. Outline Development Plan/Development Plan/Army Program Memorandum/Defense Program Memorandum/Decision Coordination Paper.
  - g. AR 70-31. Standards for Technical Reporting.
- h. AR 70-38. Research, Development, Test, and Evaluation of Materiel for Extreme Climatic Conditions.
  - i. AR 70-44. DOD Engineering for Transportability.
  - j. AR 70-47. Engineering for Transportability.
  - k. AR 71-1. Army Combat Developments.
  - 1. AR 71-3. User Testing.
  - m. AR 71-6. Type Classification/Reclassification of Army Materiel.
  - n. AR 71-9. Materiel Objectives and Requirements.
  - o. AR 200-10. Army Environmental Program.
  - p. AR 310-25. Dictionary of United States Army Terms. (Short Title: AD.)
  - q. AR 381-11. Threat Analysis.
  - r. AR 385-16. System Safety.
  - s. AR 700-127. Integrated Logistic Support.
- t. AR 702-3. Army Materiel Reliability, Avaialbility, and Maintain-ability (RAM).
  - u. AR 702-9. Production Testing.

- v. AR 750-1. Army Materiel Maintenance Concepts and Policies.
- $\mbox{w.}$  AR 1000-1. Basic Policies for Systems Acquisition by the Department of the Army.

# F-2. TRADOC Publications.

- a. TRADOC Reg 10-41. Mission Assignments (ATRM-M).
- b. TRADOC Reg 351-4. Job and Task Analysis (To be published).
- c. TRADOC Reg 600-4. Integrated Personnel Support.
- d. TRADOC Reg 700-1. Integrated Logistics Support.
- e. TRADOC Pam 71-13. (To be published.)
- f. TRADOC Pam 71-14. (To be published.)
- g. TRADOC Pam 71-15. (To be published.)
- h. TRADOC Pam 350-30. Interservice Procedures for Instructional Systems Development.

# F-3. Other Publications.

- a. DA Pam 11-25. Life Cycle System Management Model for Army Systems.
- b. DA Pam 70-21. The Coordinated Test Program (CTP).
- c. DA Pam 71-X. (Proposed) Operational Testing and Evaluation Methodolo and Procedures Guide.
  - d. DA Pam 381-14. Threat Analysis and Materiel Acquisition.
  - e. DOD Directive 5000.3. Test and Evaluation.
  - f. Joint AMC-TRADOC Materiel Acquisition Handbook.
  - g. TM 38-703 Series. Integrated Logistics Support.
- h. TM 38-710. Integrated Logistics Support Implementation Guidance for DOD Systems Equipment.
  - i. MIL-STD-1388-1. Logistics Support Analysis (LSA).
- j. MIL-STD-1388-2. Logistics Support Analysis Data Elements Definitions.
- k. MOU between the US Army Forces Command, the US Army Materiel Develoment and Readiness Command and the US Army Training and Doctrine Command, The 9th Infantry Division High Technology Test Bed, 25 Sep 80.

TRADOC Reg 71-9 / 5

DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
Fort Monroe, Virginia 23651

Change No 1

29 March 1982

Force Development USER TEST AND EVALUATION

This change incorporates new guidance on the submission of out-of-cycle outline test plans (OTP) and clarifies guidance on the use of the appendixes in superseded TRADOC Reg 71-9 (1 October 1978).

TRADOC Reg 71-9, 25 January 1982, is changed as follows:

- a. New or changed material is indicated by an asterisk.
- b. Remove old pages and insert new pages as indicated below:

Old Pag	jes	ие	w Pag	jes
$\vee$ 1 and	2	1	and	2
√ 15 and	16	15	and	16
$\checkmark$ 35 and	36	35	and	36

The proponent of this regulation is the Office of the Deputy Chief of Staff for Test and Evaluation. Users are invited to send comments and suggested changes on a DA Form 2028 (Recommended changes to Publications) through channels to the Cdr, TRADOC, ATTN: ATTE-ZC, Fort Monroe, Virginia 23651.

FOR THE COMMANDER:

OFFICIAL:

R. E Brown

R. E. BROWN Colonel, GS Adjutant General

DISTRIBUTION:
H1; TRADOC Inst1: D; CD;
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Academy, NCO Academies,
USAIPRM); T (except DPFO,
Comdt, USDB)

JOHN B. BLOUNT Major General, GS Chief of Staff

CF:
H2; H3 (except USA Rep,
Comb Svc Spt Prog Sch, Atlantic,
USA Rep, Comb Svc Spt Prog Sch,
Pacific, Cdr, USA Elm, Sch of
Music); J1; J3; S3;
Cdr, 9th Inf Div (AFZH-DG6)

# DÉPARTMENT OF THE ARMY HEADQUARTERS, UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND Fort Monroe, Virginia 23651

Curen of Ger

Change No. 2

18 October 1982



# Force Development USER TEST AND EVALUATION

This change incorporates new guidance on property accountability, authorization, requisition, equipment modification and disposition instructions for test and evaluation activities.

TRADOC Reg 71-9, 25 January 1982, is changed as follows:

- a. New or changed material is indicated by an asterisk.
- b. Remove old pages and insert new pages as indicated below:

01d Pages

New Pages

29-3247-50

29-31, 31.1-31.3, and 32 47-50

The proponent of this regulation is the Office of the Deputy Chief of Staff for Test and Evaluation. Users are invited to send comments and suggested changes on a DA Form 2028 (Recommended changes to Publications) through channels to the Cdr, TRADOC, ATTN: ATTE-ZC, Fort Monroe, Virginia 23651.

FOR THE COMMANDER:

OFFICIAL:

JOHN B. BLOUNT Major General, GS Chief of Staff

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Comdt, USDB)

CF: H2; H3 (except USA Rep, Comb Svc Spt Prog Sch, Atlantic, Pacific, Cdr, USA Elm, Sch of Music); J1; J3; S3; Cdr, 9th Inf Div (AFZH-DG6)